

Exam

Name _____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Answer the question according to what the textbook states.

- 1) Which of these is NOT listed as a tip to help you succeed in this course? 1) _____
- A) Read your textbook after you attend class.
 - B) Form study groups and/or exchange names and e-mail addresses.
 - C) Choose to attend all class periods and do your homework.
 - D) Know how to get help if you need it.

Answer: A

Explanation: A)
B)
C)
D)

- 2) Which of these is the most important general tip for success in a mathematics course? 2) _____
- A) Check your work
 - B) Organize your class materials
 - C) Do your homework
 - D) Don't be afraid to ask questions

Answer: B

Explanation: A)
B)
C)
D)

- 3) Which of these is listed as one of several steps in preparing for an exam? 3) _____
- A) Practice working out exercises by working the Chapter Review.
 - B) Skip the concepts and definitions in the Chapter Highlights at the end of the chapter.
 - C) Review your class notes, and skip reviewing previous homework assignments.
 - D) Leave for the exam as late as possible to increase your amount of study time.

Answer: A

Explanation: A)
B)
C)
D)

4) Which of these is NOT an end-of-chapter component designed to help you understand the concepts of the chapter?

4) _____

- A) Chapter Highlights
- C) Vocabulary Checks

- B) Chapter Tests
- D) Calculator Exercises

Answer: D

Explanation: A)
B)
C)
D)

Decide whether the given number is a solution of the given equation.

5) Is 10 a solution of $x + 4 = 14x$?

5) _____

A) yes

B) no

Answer: B

Explanation: A)
B)

Provide an appropriate response.

6) As part of a fund raiser, Maria sold 259 candy bars. Drew sold 146 candy bars. Write an inequality statement using $<$ or $>$ comparing the numbers 259 and 146.

6) _____

A) $259 > 146$

B) $259 < 146$

Answer: A

Explanation: A)
B)

Fill in the blank with one of the words or phrases listed below.

set
denominator
variable

inequality symbols
grouping symbols
equation

opposites
exponent
solution

absolute value
base

numerator
reciprocals

7) Two numbers that are the same distance from 0 but lie on opposite sides of 0 are called _____.

7) _____

A) opposites

B) inequality symbols

C) grouping symbols

D) reciprocals

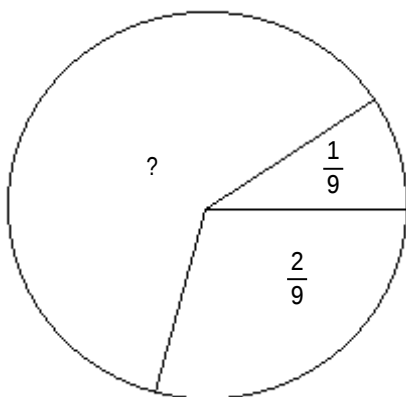
Answer: A

Explanation: A)
B)
C)
D)

The circle represents a whole, or 1. Use subtraction to determine the unknown part of the circle.

8)

8) _____



A) $\frac{6}{9}$

B) $\frac{3}{9}$

C) $\frac{8}{9}$

D) $\frac{10}{9}$

Answer: A

Explanation: A)
B)
C)
D)

Simplify the expression.

9) $(4 + 5)[7 + (7 + 2)]$

A) 72

B) 420

C) 144

D) 320

9) _____

Answer: C

Explanation: A)
B)
C)
D)

Write the sentence as a mathematical statement.

10) Negative forty-nine is less than negative seventeen.

A) $-49 > -17$

B) $-49 < -17$

C) $-49 < 17$

D) $-49 \leq -17$

10) _____

Answer: B

Explanation: A)
B)
C)
D)

Decide whether the statement is true or false.

11) The product of four negative integers is negative.

11) _____

A) True

B) False

Answer: B

Explanation: A)
B)

Simplify the expression.

12) $\frac{9}{5} \cdot \frac{2}{7} + \frac{5}{6} \cdot \frac{2}{5}$

12) _____

A) $\frac{89}{80}$

B) $\frac{16}{21}$

C) $\frac{89}{55}$

D) $\frac{89}{105}$

Answer: D

Explanation: A)
B)
C)
D)

Name the property illustrated by the statement.

13) $(1 \cdot 9) \cdot 6 = 1 \cdot (9 \cdot 6)$

13) _____

A) commutative property of multiplication

B) identity element for multiplication

C) associative property of multiplication

D) distributive property

Answer: C

Explanation: A)
B)
C)
D)

Insert <, >, or = to make the statement true.

14) $5 \frac{\quad}{\quad} - 6$

14) _____

A) <

B) >

C) =

Answer: B

Explanation: A)
B)
C)

Find the reciprocal or multiplicative inverse.

15) $\frac{1}{-0.2}$

15) _____

A) $\frac{1}{0.2}$

B) 0.2

C) no reciprocal

D) -0.2

Answer: D

Explanation: A)
B)
C)
D)

Decide whether the statement is true or false.

16) The product of a positive integer and two negative integers is positive.

16) _____

A) True

B) False

Answer: A

Explanation: A)
B)

Evaluate the expression when $x = 2$, $y = 1$, and $z = 4$.

17) $2z^2$

17) _____

A) 32

B) 18

C) 16

D) 12

Answer: A

Explanation: A)
B)
C)
D)

Translate the statement into symbols.

18) The absolute value of negative eight is greater than one.

18) _____

A) $|8| > 1$

B) $-|8| > 1$

C) $|-8| > 1$

D) $|-1| > 8$

Answer: C

Explanation: A)
B)
C)
D)

Evaluate.

19) 11^4

19) _____

A) 4,194,304

B) 1331

C) 44

D) 14,641

Answer: D

Explanation: A)
B)
C)
D)

Add or subtract as indicated. Write the answer in lowest terms.

20) $9\frac{8}{15} - 7\frac{1}{10}$

20) _____

A) $2\frac{7}{30}$

B) $2\frac{1}{2}$

C) $2\frac{13}{30}$

D) $1\frac{13}{30}$

Answer: C

Explanation: A)
B)
C)
D)

Simplify the expression.

21) $\frac{83 + 7}{3^2 - 4}$

21) _____

A) 27

B) 16

C) 18

D) 45

Answer: C

Explanation: A)
B)
C)
D)

Use the distributive property to write the expression without parentheses. Then simplify, if necessary.

22) $2(5 - 5y)$

22) _____

A) $7 - 7y$

B) $20y$

C) $10 - 5y$

D) $10 - 10y$

Answer: D

Explanation: A)
B)
C)
D)

Find the reciprocal or multiplicative inverse.

23) $\frac{1}{4.7}$

23) _____

A) no reciprocal

B) 4.7

C) -4.7

D) $-\frac{1}{4.7}$

Answer: B

Explanation: A)
B)
C)
D)

Translate the phrase to an expression and simplify.

24) Decrease 8 by 2.

A) -6

B) 10

C) -10

D) 6

24) _____

Answer: D

Explanation: A)
B)
C)
D)

Add.

25) $-22.3 + (-19.2)$

A) -41.5

B) 3.1

C) 41.5

D) -3.1

25) _____

Answer: A

Explanation: A)
B)
C)
D)

Write the sentence as an equation or inequality. Use x to represent any unknown number.

26) One increased by two equals the quotient of twelve and four.

A) $1 + 2 = 4 \div 12$

B) $1 + 2 = 12 \cdot 4$

C) $1 + 2 = 12 \div 4$

D) $1 + 2 = 12 - 4$

26) _____

Answer: C

Explanation: A)
B)
C)
D)

Solve.

27) The Neighborhood Lemonade Stand, Inc. reported net incomes of -\$314, -\$103, and -\$176 for the past three years. What was its total net income for these three years?

A) -\$417

B) -\$593

C) -\$279

D) \$593

27) _____

Answer: B

Explanation: A)
B)
C)
D)

Add or subtract as indicated. Write the answer in lowest terms.

28) $\frac{2}{5} + \frac{3}{10}$

28) _____

A) $\frac{1}{2}$

B) $\frac{7}{10}$

C) $\frac{18}{25}$

D) $\frac{1}{3}$

Answer: B

Explanation: A)
B)
C)
D)

Multiply or divide as indicated. Write the answer in lowest terms.

29) $\frac{8}{5} \cdot \frac{3}{8}$

29) _____

A) $\frac{49}{40}$

B) $\frac{3}{5}$

C) $\frac{18}{5}$

D) $\frac{1}{5}$

Answer: B

Explanation: A)
B)
C)
D)

Simplify the expression. (Remember the order of operations.)

30) $12 + 2 - (-2)$

30) _____

A) 16

B) 8

C) 12

D) -16

Answer: A

Explanation: A)
B)
C)
D)

Simplify the expression.

31) $\frac{15 + |12 - 2|}{11 - 5}$

31) _____

A) $\frac{25}{16}$

B) $\frac{29}{6}$

C) 31

D) $\frac{25}{6}$

Answer: D

Explanation: A)
B)
C)
D)

32) $\frac{1}{2} - \frac{9}{10}$

32) _____

A) $\frac{7}{5}$

B) $-\frac{4}{5}$

C) -2

D) $-\frac{2}{5}$

Answer: D

Explanation: A)
B)
C)
D)

Multiply or divide as indicated. Write the answer in lowest terms.

33) $2\frac{2}{5} \div \frac{1}{5}$

33) _____

A) $\frac{12}{25}$

B) 12

C) $10\frac{2}{5}$

D) 4

Answer: B

Explanation: A)
B)
C)
D)

Insert $<$, $>$, or $=$ to make the statement true.

34) $\frac{8}{2}$ _____ $\frac{16}{4}$

34) _____

A) $=$

B) $>$

C) $<$

Answer: A

Explanation: A)
B)
C)

Name the property illustrated by the statement.

35) $3 \cdot 9 = 9 \cdot 3$

35) _____

A) associative property of multiplication

B) commutative property of multiplication

C) distributive property

D) identity element for multiplication

Answer: B

Explanation: A)
B)
C)
D)

Write the fraction in lowest terms.

36) $\frac{3}{6}$

36) _____

A) $\frac{3}{6}$

B) $\frac{6}{12}$

C) $\frac{1}{2}$

D) 2

Answer: C

Explanation: A)
B)
C)
D)

Add.

37) $[12 + (-11)] + [10 + (-9)]$

37) _____

A) 42

B) 2

C) -18

D) 0

Answer: B

Explanation: A)
B)
C)
D)

Simplify the expression.

38) $(7)(-6)$

38) _____

A) -49

B) -142

C) -420

D) -42

Answer: D

Explanation: A)
B)
C)
D)

Simplify the expression. (Remember the order of operations.)

39) $4 + (-16) - 12 - (-19) + (-8)$

39) _____

A) -27

B) 21

C) -51

D) -13

Answer: D

Explanation: A)
B)
C)
D)

Simplify the expression.

40) $\frac{1}{3} + \frac{1}{6} \cdot \frac{1}{4}$

40) _____

A) $\frac{11}{9}$

B) $\frac{3}{8}$

C) $\frac{1}{36}$

D) $\frac{1}{8}$

Answer: B

Explanation: A)
B)
C)
D)

Use an associative property to complete the statement.

41) $2y + (2x - 5) =$ _____

41) _____

A) $-3x + -6$

B) $(2y - 5) + 2x$

C) $(-10y + 2x) - 5$

D) $(2y + 2x) - 5$

Answer: D

Explanation: A)
B)
C)
D)

Tell which set or sets the number belongs to: natural numbers, whole numbers, integers, rational numbers, irrational numbers, and real numbers.

42) $\sqrt{24}$

42) _____

A) rational, real

B) whole, real

C) irrational, real

D) integer, real

Answer: C

Explanation: A)
B)
C)
D)

Insert <, >, or = to make the statement true.

43) $0 \frac{-3}{-3}$

43) _____

A) =

B) <

C) >

Answer: C

Explanation: A)
B)
C)

Name the property illustrated by the statement.

44) $6 + 0 = 6$

44) _____

A) distributive property

B) associative property of addition

C) identity element for addition

D) commutative property of addition

Answer: C

Explanation: A)

B)

C)

D)

Use an integer to represent the value in the statement.

45) 12° above zero

45) _____

A) -12

B) 12

Answer: B

Explanation: A)

B)

Solve the problem.

46) On Tuesday, the temperature was 56° Fahrenheit. On Thursday, the temperature was 40° Fahrenheit. Write an inequality statement using $<$ or $>$ comparing the numbers 56 and 40.

46) _____

A) $56 > 40$

B) $56 < 40$

Answer: A

Explanation: A)

B)

Tell which set or sets the number belongs to: natural numbers, whole numbers, integers, rational numbers, irrational numbers, and real numbers.

47) -67

47) _____

A) real

B) irrational, real

C) integer, rational, real

D) whole, real

Answer: C

Explanation: A)

B)

C)

D)

Add or subtract as indicated. Write the answer in lowest terms.

48) $6\frac{2}{9} - 3\frac{5}{6}$

48) _____

A) $1\frac{5}{6}$

B) $2\frac{7}{18}$

C) $1\frac{7}{18}$

D) $2\frac{5}{18}$

Answer: B

Explanation: A)
B)
C)
D)

Insert <, >, or = to make the statement true.

49) $\left| -\frac{8}{9} \right| \text{ --- } \left| \frac{8}{9} \right|$

49) _____

A) <

B) =

C) >

Answer: B

Explanation: A)
B)
C)

Write the number as a product of primes.

50) 243

50) _____

A) $3 \cdot 3 \cdot 3 \cdot 3 \cdot 3$

B) $3 \cdot 3 \cdot 3 \cdot 5$

C) $3 \cdot 3 \cdot 7$

D) $3 \cdot 3 \cdot 3 \cdot 3$

Answer: A

Explanation: A)
B)
C)
D)

Multiply or divide as indicated. Write the answer in lowest terms.

51) $\frac{4}{9} \div \frac{3}{7}$

51) _____

A) $\frac{4}{63}$

B) $\frac{28}{27}$

C) $\frac{7}{16}$

D) $\frac{63}{4}$

Answer: B

Explanation: A)
B)
C)
D)

Use the distributive property to write the expression without parentheses. Then simplify, if necessary.

52) $12x - 4(7y - 12)$

A) $12x - 28y + 48$

B) $12x - 28y + 12$

C) $12x - 28y - 12$

D) $12x - 28y - 48$

52) _____

Answer: A

Explanation: A)
B)
C)
D)

Multiply.

53) $\frac{7}{2}(-24)$

A) - 84

B) $-\frac{15}{2}$

C) 9

D) $\frac{504}{5}$

53) _____

Answer: A

Explanation: A)
B)
C)
D)

Identify the property illustrated by the expression.

54) $12 + (20 + 22) = (12 + 20) + 22$

A) associative property of addition

B) distributive property

C) commutative property of addition

D) identity element for addition

54) _____

Answer: A

Explanation: A)
B)
C)
D)

Is the following statement true or false?

55) $7 \cdot 8 \leq 9 + 17$

A) True

B) False

55) _____

Answer: B

Explanation: A)
B)

56) $-17 \geq 20$

A) True

B) False

56) _____

Answer: B

Explanation: A)
B)

Multiply or divide as indicated. Write the answer in lowest terms.

57) $\frac{4}{13} \div \frac{7}{20}$

57) _____

A) $\frac{79}{91}$

B) $\frac{80}{91}$

C) $\frac{80}{89}$

D) $\frac{6}{7}$

Answer: B

Explanation: A)
B)
C)
D)

Use the distributive property to write the sum as a product.

58) $(-1) \cdot 9 + (-1) \cdot b$

58) _____

A) $-1(9b)$

B) $1(9 + b)$

C) $-1(9 + b)$

D) $-1(9 - b)$

Answer: C

Explanation: A)
B)
C)
D)

Add or subtract as indicated. Write the answer in lowest terms.

59) $16\frac{4}{7} + 10\frac{1}{6}$

59) _____

A) $16\frac{31}{42}$

B) $25\frac{31}{42}$

C) $27\frac{31}{42}$

D) $26\frac{31}{42}$

Answer: D

Explanation: A)
B)
C)
D)

Find the reciprocal or multiplicative inverse.

60) $\frac{1}{8}$

60) _____

A) $-\frac{1}{8}$

B) 8

C) -8

D) 1

Answer: B

Explanation: A)
B)
C)
D)

Is the following statement true or false?

61) $10 > 10$

A) True

B) False

61) _____

Answer: B

Explanation: A)
B)

Decide whether the statement is true or false.

62) The product of three positive integers is positive.

A) True

B) False

62) _____

Answer: A

Explanation: A)
B)

Name the property illustrated by the statement.

63) $\frac{1}{6} \cdot 6 = 1$

A) multiplicative inverse property

B) identity element for multiplication

C) distributive property

D) associative property of multiplication

63) _____

Answer: A

Explanation: A)
B)
C)
D)

Multiply.

64) $-\frac{28}{48} \left(\frac{6}{7} \right)$

A) $1\frac{1}{7}$

B) $-\frac{1}{2}$

C) $-\frac{7}{12}$

D) $\frac{1}{2}$

64) _____

Answer: B

Explanation: A)
B)
C)
D)

65) $(-15)(-15)$

A) -240

B) -225

C) 225

D) 240

65) _____

Answer: C

Explanation: A)
B)
C)
D)

Simplify the expression. (Remember the order of operations.)

66) $13 - (-16) + 1$

A) 4

B) 30

C) -4

D) -2

66) _____

Answer: B

Explanation: A)

B)

C)

D)

Decide whether the given number is a solution of the given equation.

67) Is -8 a solution of $-x - 4 = -x - 2$?

A) yes

B) no

67) _____

Answer: B

Explanation: A)

B)

Write the number as a product of primes.

68) 84

A) $2 \cdot 2 \cdot 3 \cdot 7$

B) $2 \cdot 2 \cdot 2 \cdot 3 \cdot 7$

C) $2 \cdot 3 \cdot 7$

D) $2 \cdot 2 \cdot 3 \cdot 5$

68) _____

Answer: A

Explanation: A)

B)

C)

D)

69) 42

A) $6 \cdot 7$

B) $2 \cdot 3 \cdot 7$

C) $3 \cdot 3 \cdot 2$

D) $2 \cdot 2 \cdot 7$

69) _____

Answer: B

Explanation: A)

B)

C)

D)

Evaluate the expression for the given replacement values.

70) $2 + 2x - y$ $x = 4, y = -5$

A) 20

B) 9

C) 15

D) 21

70) _____

Answer: C

Explanation: A)

B)

C)

D)

Fill in the blank with one of the words or phrases listed below.

set
denominator
variable

inequality symbols
grouping symbols
equation

opposites
exponent
solution

absolute value
base

numerator
reciprocals

71) In 2^3 , the 2 is called the _____ and the 3 is called the _____.

A) base, exponent

B) denominator, numerator

C) exponent, base

D) numerator, denominator

Answer: A

Explanation: A)

B)

C)

D)

71) _____

Find the absolute value of the number.

72) $|-10|$

A) 20

B) -10

C) 10

D) 0

Answer: C

Explanation: A)

B)

C)

D)

72) _____

Simplify the expression.

73) $\frac{(-6)(0)(-3)}{-4}$

A) $-\frac{9}{2}$

B) undefined

C) $\frac{9}{4}$

D) 0

Answer: D

Explanation: A)

B)

C)

D)

73) _____

Evaluate.

74) -1^{10}

A) -10

B) 0

C) -1

D) 1

Answer: C

Explanation: A)

B)

C)

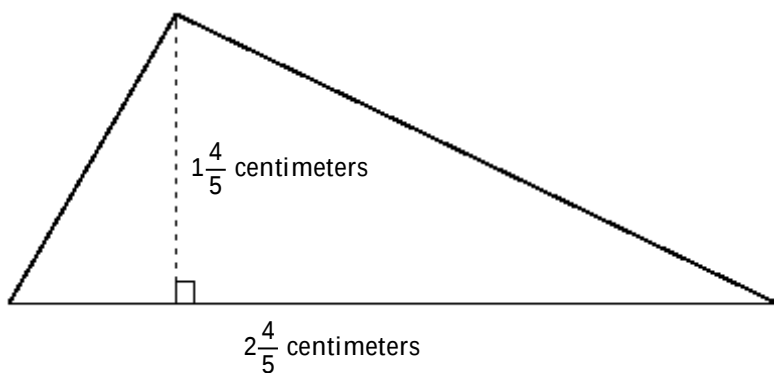
D)

74) _____

Find the area of the figure below. (The area of a rectangle is the product of its length and width. The area of a triangle is $\frac{1}{2}$ the product of its base and height.)

75)

75) _____



A) $2\frac{13}{25}$ sq cm

B) $4\frac{3}{5}$ sq cm

C) $5\frac{1}{25}$ sq cm

D) $10\frac{2}{25}$ sq cm

Answer: A

Explanation: A)
B)
C)
D)

Write the number as a product of primes.

76) 8

76) _____

A) $2 \cdot 4$

B) $2 \cdot 2$

C) $2 \cdot 2 \cdot 2$

D) $2 \cdot 2 \cdot 3$

Answer: C

Explanation: A)
B)
C)
D)

Tell whether the statement is true or false.

77) Every whole number is a real number.

77) _____

A) True

B) False

Answer: A

Explanation: A)
B)

Find the reciprocal or multiplicative inverse.

78) 5

A) -5

B) 1

C) $-\frac{1}{5}$

D) $\frac{1}{5}$

78) _____

Answer: D

Explanation: A)
B)
C)
D)

Add or subtract as indicated. Write the answer in lowest terms.

79) $\frac{4}{7} + \frac{1}{6}$

A) $\frac{5}{13}$

B) $\frac{17}{21}$

C) $\frac{5}{42}$

D) $\frac{31}{42}$

79) _____

Answer: D

Explanation: A)
B)
C)
D)

Divide.

80) $\frac{105}{-7}$

A) 15

B) -25

C) $-\frac{1}{15}$

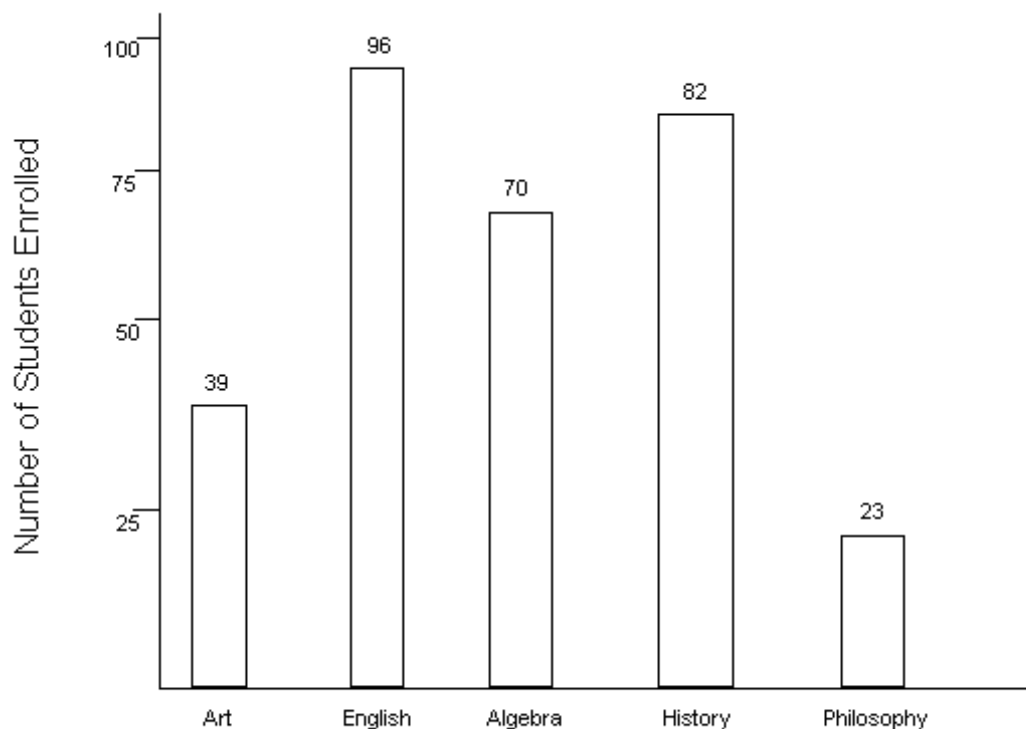
D) -15

80) _____

Answer: D

Explanation: A)
B)
C)
D)

The graph below shows the number of students enrolled in various courses at State University in spring 2000. Each bar represents a different course, and the height of the bar represents the number of students enrolled. Use the graph to answer the question.



81) Which course had the lowest enrollment?

A) Art

B) Philosophy

C) English

D) Algebra

81) _____

Answer: B

Explanation: A)
B)
C)
D)

Insert <, >, or = to make the statement true.

82) $|-8|$ _____ 7

A) <

B) =

C) >

82) _____

Answer: C

Explanation: A)
B)
C)

Solve.

- 83) Lauren scored 3 points in her basketball game on Monday, 20 on Wednesday, 2 on Friday, and 13 on Saturday. Find her total points scored for the week. 83) _____

A) 37 points B) 25 points C) 39 points D) 38 points

Answer: D

Explanation: A)
B)
C)
D)

Simplify.

- 84) $-|-0|$ 84) _____

A) -1 B) 0 C) 1 D) Undefined

Answer: B

Explanation: A)
B)
C)
D)

Add or subtract as indicated. Write the answer in lowest terms.

- 85) $\frac{7}{8} - \frac{6}{11} + \frac{1}{2}$ 85) _____

A) $\frac{169}{88}$ B) $\frac{73}{88}$ C) $\frac{73}{176}$ D) $\frac{73}{44}$

Answer: B

Explanation: A)
B)
C)
D)

Write the sentence as an equation or inequality. Use x to represent any unknown number.

- 86) Four is not equal to six divided by two. 86) _____

A) $4 \neq 6$ B) $4 \neq 6 \div 2$ C) $4 = 6 \div 2$ D) $4 \div 2 \neq 6$

Answer: B

Explanation: A)
B)
C)
D)

Use the distributive property to write the expression without parentheses. Then simplify, if necessary.

87) $3(9x + 6)$

A) $12x + 9$

B) $27x + 6$

C) $45x$

D) $27x + 18$

87) _____

Answer: D

Explanation: A)
B)
C)
D)

Add.

88) $5.8 + (-9.9)$

A) 15.7

B) -4.1

C) -15.7

D) 4.1

88) _____

Answer: B

Explanation: A)
B)
C)
D)

Solve the problem.

89) Building A is 62 feet tall. Building B is 80 feet tall. Write an inequality statement using $<$ or $>$ comparing the numbers 62 and 80.

A) $62 < 80$

B) $62 > 80$

89) _____

Answer: A

Explanation: A)
B)

Subtract.

90) $\frac{3}{4} - \left(\frac{1}{7}\right)$

A) $-\frac{17}{28}$

B) $\frac{1}{4}$

C) $\frac{17}{28}$

D) $\frac{1}{16}$

90) _____

Answer: C

Explanation: A)
B)
C)
D)

Multiply.

91) $(-3)(-8)(0)(9)$

A) -216

B) 0

C) 216

D) -72

91) _____

Answer: B

Explanation: A)
B)
C)
D)

Is the following statement true or false?

92) $12 \leq 9$

92) _____

A) True

B) False

Answer: B

Explanation: A)
B)

Solve. Simplify the answer.

93) Jeffrey has two packages. One weighs $4\frac{1}{2}$ ounces, and the other weighs $\frac{3}{7}$ of an ounce. What is the total weight of the two packages?

93) _____

A) $4\frac{13}{14}$ oz

B) $1\frac{1}{3}$ oz

C) $1\frac{13}{14}$ oz

D) $6\frac{1}{3}$ oz

Answer: A

Explanation: A)
B)
C)
D)

Solve.

94) The temperature at 5:00 was -2°C . Four hours later, it was -12°C . What was the change in temperature?

94) _____

A) -14°C

B) 14°C

C) 10°C

D) -10°C

Answer: D

Explanation: A)
B)
C)
D)

Simplify the expression. (Remember the order of operations.)

95) $5 + (-14) - (-19)$

95) _____

A) -28

B) -10

C) 10

D) 0

Answer: C

Explanation: A)
B)
C)
D)

Simplify the expression.

96) $(3)(-3)$

A) 9

B) -9

C) 1

D) -18

96) _____

Answer: B

Explanation: A)
B)
C)
D)

Multiply or divide as indicated. Write the answer in lowest terms.

97) $4\frac{1}{5} \div 2\frac{1}{10}$

A) 2

B) $8\frac{41}{50}$

C) $3\frac{1}{3}$

D) 4

97) _____

Answer: A

Explanation: A)
B)
C)
D)

Add or subtract as indicated. Write the answer in lowest terms.

98) $\frac{3}{10} - \frac{1}{8}$

A) $\frac{7}{40}$

B) $\frac{11}{40}$

C) $\frac{7}{80}$

D) $\frac{1}{20}$

98) _____

Answer: A

Explanation: A)
B)
C)
D)

99) $\frac{6}{7} - \frac{1}{4}$

A) $\frac{5}{7}$

B) $\frac{17}{28}$

C) $\frac{17}{7}$

D) $\frac{5}{28}$

99) _____

Answer: B

Explanation: A)
B)
C)
D)

Tell whether the statement is true or false.

100) Every irrational number is an integer.

100) _____

A) True

B) False

Answer: B

Explanation: A)
B)

Solve the problem.

101) An NFL football team was 39 yards from the goal when the following series of gains and losses occurred.

101) _____

Gains and Losses in Yards	
First Down	12
Second Down	-8
Third Down	-6
Fourth Down	13

Was a touchdown scored?

A) Yes

B) No

Answer: B

Explanation: A)
B)

Tell which set or sets the number belongs to: natural numbers, whole numbers, integers, rational numbers, irrational numbers, and real numbers.

102) 36

102) _____

A) natural, whole, integer, rational, real

B) real

C) integer, rational, real

D) whole, rational, real

Answer: A

Explanation: A)
B)
C)
D)

Simplify the expression.

103) $16 + (11 \cdot 23) - 23$

103) _____

A) 27

B) 0

C) 598

D) 246

Answer: D

Explanation: A)
B)
C)
D)

Multiply.

104) $(2)(5)(2)(-5)(-3)$

A) -100

B) 1

C) 300

D) -300

104) _____

Answer: C

Explanation: A)
B)
C)
D)

Decide whether the given number is a solution of the given equation.

105) Is 15 a solution of $x - 10 = x - 5$?

A) yes

B) no

105) _____

Answer: B

Explanation: A)
B)

Use the distributive property to write the sum as a product.

106) $15 \cdot z + 15 \cdot 2$

A) $15(z + 2)$

B) $(15z + 30)$

C) $(30z)$

D) $(17z)$

106) _____

Answer: A

Explanation: A)
B)
C)
D)

Add.

107) $-|9| + |4|$

A) 5

B) 13

C) -5

D) -13

107) _____

Answer: C

Explanation: A)
B)
C)
D)

Use the commutative and associative properties to simplify the expression.

108) $(-2 + 5x) + 6$

A) $-12 + 5x$

B) $-22x$

C) $4x + 6$

D) $4 + 5x$

108) _____

Answer: D

Explanation: A)
B)
C)
D)

Write the sentence as an equation or inequality. Use x to represent any unknown number.

109) Two subtracted from eleven is equal to three squared.

109) _____

A) $11 - 2 = 3^2$

B) $11 - 2 = 2 \cdot 3$

C) $2 - 11 = 2 \cdot 3$

D) $2 - 11 = 3^2$

Answer: A

Explanation: A)

B)

C)

D)

Add or subtract as indicated. Write the answer in lowest terms.

110) $19\frac{1}{3} + 7\frac{2}{9}$

110) _____

A) $19\frac{5}{9}$

B) $25\frac{5}{9}$

C) $27\frac{5}{9}$

D) $26\frac{5}{9}$

Answer: D

Explanation: A)

B)

C)

D)

Multiply.

111) $-\frac{4}{7} \left(-\frac{1}{7} \right)$

111) _____

A) $\frac{4}{49}$

B) $-\frac{11}{35}$

C) $-\frac{11}{294}$

D) $\frac{24}{35}$

Answer: A

Explanation: A)

B)

C)

D)

Add or subtract as indicated. Write the answer in lowest terms.

112) $\frac{11}{40} - \frac{5}{24}$

112) _____

A) $\frac{1}{120}$

B) $\frac{1}{20}$

C) $\frac{7}{30}$

D) $\frac{1}{15}$

Answer: D

Explanation: A)

B)

C)

D)

Is the following statement true or false?

113) $12 < -4$

A) True

B) False

113) _____

Answer: B

Explanation: A)
B)

Use an integer to represent the value in the statement.

114) \$480 loss

A) 480

B) -480

114) _____

Answer: B

Explanation: A)
B)

Divide.

115) $\frac{-98}{0}$

A) undefined

B) 0

C) 98

D) 1

115) _____

Answer: A

Explanation: A)
B)
C)
D)

Evaluate the expression when $x = 2$, $y = 1$, and $z = 4$.

116) $|9z - 4y|$

A) 28

B) -32

C) 32

D) 40

116) _____

Answer: C

Explanation: A)
B)
C)
D)

Evaluate the expression when $x = 5$, $y = -2$, and $t = 8$.

117) $x - y$

A) -3

B) 7

C) -7

D) 3

117) _____

Answer: B

Explanation: A)
B)
C)
D)

Multiply.

118) $(-3)(5)(-4)(-5)$

A) 60

B) 300

C) -7

D) -300

118) _____

Answer: D

Explanation: A)
B)
C)
D)

Perform the indicated operations.

119) $(-5)(9) - (-19)(6)$

A) -159

B) -69

C) 69

D) 17

119) _____

Answer: C

Explanation: A)
B)
C)
D)

Insert $<$, $>$, or $=$ to make the statement true.

120) -400 _____ -40

A) $=$

B) $<$

C) $>$

120) _____

Answer: B

Explanation: A)
B)
C)

Simplify the expression. (Remember the order of operations.)

121) $-3 - (-20) + (-6)$

A) -11

B) -29

C) -17

D) 11

121) _____

Answer: D

Explanation: A)
B)
C)
D)

Multiply.

122) $0 \cdot -20$

A) -20

B) -40

C) 0

D) 20

122) _____

Answer: C

Explanation: A)
B)
C)
D)

Simplify the expression. (Remember the order of operations.)

123) $(4 - 2)(3 + 4) - 2^2$

A) 4

B) 7

C) 10

D) 18

123) _____

Answer: C

Explanation: A)
B)
C)
D)

Evaluate the expression when $x = 5$, $y = -2$, and $t = 8$.

124) $t^3 - 2y$

A) 516

B) 508

C) 20

D) 28

124) _____

Answer: A

Explanation: A)
B)
C)
D)

Use a commutative property to complete the statement.

125) $3 + x =$ _____

A) $x - 3$

B) $-x - 3$

C) $x + 3$

D) $3 - x$

125) _____

Answer: C

Explanation: A)
B)
C)
D)

Evaluate the expression when $x = 5$, $y = -2$, and $t = 8$.

126) $5x - 3t + |y|$

A) 27

B) -1

C) 3

D) 51

126) _____

Answer: C

Explanation: A)
B)
C)
D)

Subtract.

$$127) -\frac{3}{2} - \left(-\frac{1}{4}\right)$$

A) $\frac{5}{8}$

B) $-\frac{5}{16}$

C) $\frac{7}{4}$

D) $-\frac{7}{4}$

127) _____

Answer: D

Explanation: A)
B)
C)
D)

Evaluate.

$$128) (0.67)^2$$

A) 44.89

B) 1.34

C) 0.335

D) 0.4489

128) _____

Answer: D

Explanation: A)
B)
C)
D)

Solve. Simplify the answer.

129) The total length of a bicycle race is $\frac{11}{14}$ of a mile. Chloe has completed $\frac{6}{14}$ of a mile. How much does she have left to complete?

129) _____

A) $\frac{11}{14}$ mi

B) $\frac{5}{14}$ mi

C) $\frac{17}{14}$ mi

D) $\frac{3}{7}$ mi

Answer: B

Explanation: A)
B)
C)
D)

130) Brian was training to run a marathon. During the three-day period before the race he decided that he would train for a total of 10 hours. If he trained for $2\frac{3}{5}$ hours on the first day and $2\frac{9}{10}$ hours on the second day, how many hours would he need to train on the third day?

130) _____

A) $5\frac{1}{2}$ hr

B) $4\frac{1}{2}$ hr

C) $4\frac{3}{5}$ hr

D) $4\frac{4}{5}$ hr

Answer: B

Explanation: A)
B)
C)
D)

Multiply or divide as indicated. Write the answer in lowest terms.

131) $2\frac{2}{5} \cdot 1\frac{2}{3}$

131) _____

A) 4

B) 9

C) 5

D) $2\frac{9}{15}$

Answer: A

Explanation: A)
B)
C)
D)

132) $\frac{2}{5} \div 10$

132) _____

A) $\frac{1}{5}$

B) $\frac{1}{25}$

C) 4

D) 25

Answer: B

Explanation: A)
B)
C)
D)

Evaluate.

133) 9^3

133) _____

A) 27

B) 512

C) 729

D) 19,683

Answer: C

Explanation: A)
B)
C)
D)

Name the property illustrated by the statement.

134) $7 + (-7) = 0$

134) _____

A) commutative property of addition

B) additive inverse property

C) identity element for addition

D) associative property of addition

Answer: B

Explanation: A)
B)
C)
D)

Find the reciprocal or multiplicative inverse.

135) -100

A) -1

B) $\frac{1}{100}$

C) 100

D) $-\frac{1}{100}$

135) _____

Answer: D

Explanation: A)
B)
C)
D)

Is the following statement true or false?

136) $10 + 5 \leq 3(7)$

A) True

B) False

136) _____

Answer: A

Explanation: A)
B)

List the numbers in set B that belong to the indicated set.

137) $B = \left\{ 19, \sqrt{6}, -10, 0, \frac{0}{4}, \sqrt{9}, 2\pi, \frac{-5}{0} \right\}$

Real numbers

A) $19, \sqrt{6}, -10, 0, \frac{0}{4}, \sqrt{9}, 2\pi$

B) $19, -10, 0, \frac{0}{4}, \frac{-5}{0}$

C) $19, -10, 0, \frac{0}{4}, \sqrt{9}, 2\pi$

D) $19, -10, 0, \sqrt{9}$

137) _____

Answer: A

Explanation: A)
B)
C)
D)

Simplify.

138) $\frac{6+1}{-4-3}$

A) 7

B) 5

C) -1

D) $\frac{5}{7}$

138) _____

Answer: C

Explanation: A)
B)
C)
D)

Solve.

139) Sean has \$175 in his savings account. After he withdraws \$87, what will his balance be?

139) _____

A) -\$88

B) \$262

C) \$88

D) -\$262

Answer: C

Explanation: A)

B)

C)

D)

Solve. Simplify the answer.

140) A laminated lab bench has $3\frac{2}{3}$ inches of plywood, $3\frac{3}{4}$ inches of pressed board, and $\frac{7}{10}$ of an inch of formica. What is the thickness of the lab bench?

140) _____

A) $\frac{17}{33}$ in.

B) $\frac{60}{487}$ in.

C) $1\frac{16}{17}$ in.

D) $8\frac{7}{60}$ in.

Answer: D

Explanation: A)

B)

C)

D)

Simplify the expression.

141) $\frac{-36}{0}$

141) _____

A) 1

B) 36

C) undefined

D) 0

Answer: C

Explanation: A)

B)

C)

D)

Write the fraction in lowest terms.

142) $\frac{60}{72}$

142) _____

A) $\frac{5}{12}$

B) $\frac{5}{6}$

C) $\frac{60}{72}$

D) $\frac{12}{6}$

Answer: B

Explanation: A)

B)

C)

D)

Write the phrase as an algebraic expression. Let x represent the unknown number.

143) The quotient of a number and 4

143) _____

A) $\frac{4}{x}$

B) $4x$

C) $x - 4$

D) $\frac{x}{4}$

Answer: D

Explanation: A)
B)
C)
D)

Insert <, >, or = to make the statement true.

144) -0.9 _____ -1.0

144) _____

A) =

B) <

C) >

Answer: C

Explanation: A)
B)
C)
D)

Use an associative property to complete the statement.

145) $(6x + 3y) + 8z =$ _____

145) _____

A) $6x + 3y + 8z$

B) $(6x + 3y + 8z)$

C) $(3y + 6x) + 8z$

D) $6x + (3y + 8z)$

Answer: D

Explanation: A)
B)
C)
D)

Write the fraction as an equivalent fraction with the given denominator.

146) $\frac{2}{3}$ with a denominator of 15

146) _____

A) $\frac{6}{15}$

B) $\frac{5}{15}$

C) $\frac{2}{15}$

D) $\frac{10}{15}$

Answer: D

Explanation: A)
B)
C)
D)

Decide whether the given number is a solution of the given equation.

147) Is 0 a solution of $x = 9x - 27$?

147) _____

A) yes

B) no

Answer: B

Explanation: A)
B)

Insert <, >, or = to make the statement true.

148) $-\frac{7}{23}$ ____ $-\frac{4}{23}$

148) ____

A) =

B) >

C) <

Answer: C

Explanation: A)
B)
C)

149) $|-4|$ ____ $\frac{8}{-2}$

149) ____

A) <

B) >

C) =

Answer: B

Explanation: A)
B)
C)

List the numbers in set B that belong to the indicated set.

150) $B = \left\{ 20, \sqrt{8}, -11, 0, \frac{0}{5}, \sqrt{9}, \frac{-7}{0}, 2\pi, 0.52 \right\}$

150) ____

Rational numbers

A) 20, 0, $\sqrt{9}$, 2π

B) 20, -11, 0, $\frac{0}{5}$, $\sqrt{9}$, 0.52

C) $\sqrt{8}$, $\frac{0}{5}$, 0.52

D) $\sqrt{8}$, $\sqrt{9}$

Answer: B

Explanation: A)
B)
C)
D)

Use the distributive property to write the expression without parentheses. Then simplify, if necessary.

151) $7(5x + 6) - 4$

151) ____

A) $35x + 2$

B) $12x + 9$

C) $35x + 14$

D) $35x + 38$

Answer: D

Explanation: A)
B)
C)
D)

Divide.

152) $\frac{-68}{4}$

152) _____

A) 17

B) $-\frac{1}{17}$

C) -27

D) -17

Answer: D

Explanation: A)
B)
C)
D)

Multiply.

153) $5(-2)$

153) _____

A) -100

B) -15

C) -110

D) -10

Answer: D

Explanation: A)
B)
C)
D)

Use an integer to represent the value in the statement.

154) 181 feet above sea level

154) _____

A) 181

B) -181

Answer: A

Explanation: A)
B)

Fill in the blank with one of the words or phrases listed below.

set	inequality symbols	opposites	absolute value	numerator
denominator	grouping symbols	exponent	base	reciprocals
variable	equation	solution		

155) A _____ of an equation is a value for the variable that makes the equation a true statement.

155) _____

A) variable

B) solution

C) base

D) set

Answer: B

Explanation: A)
B)
C)
D)

Tell which set or sets the number belongs to: natural numbers, whole numbers, integers, rational numbers, irrational numbers, and real numbers.

156) $\frac{1}{19}$

156) _____

A) rational, real

B) whole, real

C) irrational, real

D) real

Answer: A

Explanation: A)
B)
C)
D)

Subtract.

157) $8 - 10$

157) _____

A) 2

B) 18

C) -2

D) -18

Answer: C

Explanation: A)
B)
C)
D)

Divide.

158) $\frac{-88}{-4}$

158) _____

A) 12

B) 22

C) -22

D) $\frac{1}{22}$

Answer: B

Explanation: A)
B)
C)
D)

Simplify the expression.

159) $-9.2 + 5.5$

159) _____

A) -3.7

B) 3.7

C) 14.7

D) -14.7

Answer: A

Explanation: A)
B)
C)
D)

160) $3[-4 + 5(-4 + 3)]$

A) -7

B) -17

C) -3

D) -27

160) _____

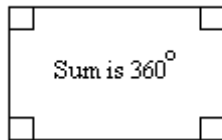
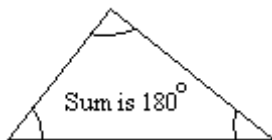
Answer: D

Explanation: A)
B)
C)
D)

Solve the problem.

161) The sum of the measures of the angles of a triangle is 180° . The sum of the measures of the angles of a rectangle is 360° . Use the inequality symbol $\leq$ or $\geq$ to write a statement comparing the numbers 180 and 360.

161) _____



A) $180 \geq 360$

B) $180 \leq 360$

Answer: B

Explanation: A)
B)

Use the distributive property to write the expression without parentheses. Then simplify, if necessary.

162) $9(x - 6)$

A) $9x - 54$

B) $9x + 54$

C) $9x - 15$

D) $9x - 6$

162) _____

Answer: A

Explanation: A)
B)
C)
D)

Add.

163) $-7 + (-24)$

A) -17

B) -31

C) 17

D) 31

163) _____

Answer: B

Explanation: A)
B)
C)
D)

Tell whether the statement is true or false.

164) Some rational numbers are irrational.

A) True

B) False

164) _____

Answer: B

Explanation: A)
B)

Simplify the expression.

165) $-8 + 7$

A) 1

B) -1

C) 15

D) -15

165) _____

Answer: B

Explanation: A)
B)
C)
D)

Find the absolute value of the number.

166) $|0|$

A) 0

B) does not exist

166) _____

Answer: A

Explanation: A)
B)

Evaluate the expression for the given replacement values.

167) $x^2 + y^2$ $x = 6, y = -7$

A) 1764

B) 85

C) 84

D) 26

167) _____

Answer: B

Explanation: A)
B)
C)
D)

Insert $<$, $>$, or $=$ to make the statement true.

168) $|-1|$ _____ $-4 - (-5)$

A) $<$

B) $=$

C) $>$

168) _____

Answer: B

Explanation: A)
B)
C)

169) $5.8 \underline{\quad} 5.8$

A) $<$

B) $=$

C) $>$

169) _____

Answer: B

Explanation: A)
B)
C)

Identify the property illustrated by the expression.

170) $-4(6 + 8) = -4 \cdot 6 + (-4) \cdot 8$

A) associative property of addition

B) associative property of multiplication

C) distributive property

D) commutative property of multiplication

170) _____

Answer: C

Explanation: A)
B)
C)
D)

Insert $<$, $>$, or $=$ to make the statement true.

171) $0.2 \underline{\quad} 0.7$

A) $>$

B) $<$

C) $=$

171) _____

Answer: B

Explanation: A)
B)
C)

Fill in the blank with one of the words or phrases listed below.

set	inequality symbols	opposites	absolute value	numerator
denominator	grouping symbols	exponent	base	reciprocals
variable	equation	solution		

172) Two numbers whose product is 1 are called _____.

A) grouping symbols

B) inequality symbols

C) reciprocals

D) opposites

172) _____

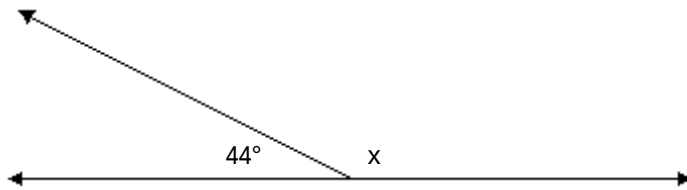
Answer: C

Explanation: A)
B)
C)
D)

Find the unknown complementary or supplementary angle.

173)

173) _____



A) 131°

B) 126°

C) 136°

D) 146°

Answer: C

Explanation: A)
B)
C)
D)

Solve.

174) In a game of cards, Lindsey won 4 chips, lost 15 chips, won 11 chips, and lost 5 chips. What was her final count of chips?

174) _____

A) -5 chips

B) 5 chips

C) -27 chips

D) 35 chips

Answer: A

Explanation: A)
B)
C)
D)

Simplify.

175) $\frac{23 + 7}{3^2 - 4}$

175) _____

A) 6

B) 9

C) 4

D) 15

Answer: A

Explanation: A)
B)
C)
D)

Simplify the expression.

176) $3(-4)^2 - 60$

176) _____

A) 12

B) -12

C) -108

D) -72

Answer: B

Explanation: A)
B)
C)
D)

Find the opposite (additive inverse), and the reciprocal (multiplicative inverse). Assume that the value of an expression is not 0.

177) Expression: $2x$ Opposite: _____ Reciprocal: _____ 177) _____

A) Opposite: $-2x$

Reciprocal: $-\frac{1}{2x}$

B) Opposite: $-\frac{1}{2x}$

Reciprocal: $-2x$

C) Opposite: $\frac{1}{2x}$

Reciprocal: $-2x$

D) Opposite: $-2x$

Reciprocal: $\frac{1}{2x}$

Answer: D

Explanation: A)

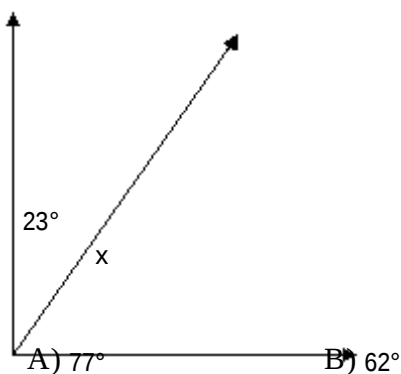
B)

C)

D)

Find the unknown complementary or supplementary angle.

178) _____ 178) _____



C) 57°

D) 67°

Answer: D

Explanation: A)

B)

C)

D)

Add.

179) $|27| + 26$ 179) _____

A) 53

B) 1

C) -53

D) -1

Answer: A

Explanation: A)

B)

C)

D)

Solve. Simplify the answer.

180) To obtain a certain shade of paint, Peter mixed $3\frac{1}{5}$ gallons of white paint with $1\frac{8}{9}$ gallons of brown paint and 3 gallons of blue paint. How much paint did he have? 180) _____

- A) $\frac{17}{42}$ gal B) $8\frac{4}{45}$ gal C) $\frac{45}{364}$ gal D) $2\frac{8}{17}$ gal

Answer: B

Explanation: A)
B)
C)
D)

Tell whether the statement is true or false.

181) 0 is a natural number. 181) _____

- A) True B) False

Answer: B

Explanation: A)
B)

Use the distributive property to write the expression without parentheses. Then simplify, if necessary.

182) $4(2x - 3)$ 182) _____

- A) $8x - 3$ B) $20x$ C) $6x - 7$ D) $8x - 12$

Answer: D

Explanation: A)
B)
C)
D)

Decide whether the given number is a solution of the given equation.

183) Is 12 a solution of $\frac{x}{2} = -6$? 183) _____

- A) no B) yes

Answer: A

Explanation: A)
B)

Use the distributive property to write the expression without parentheses. Then simplify, if necessary.

184) $8(x + y)$ 184) _____

- A) $8x + 8y$ B) $8xy$ C) $8x + y$ D) $8x - 8y$

Answer: A

Explanation: A)
B)
C)
D)

Evaluate the expression for the given replacement values.

185) $\frac{9x - 3y}{x + 7}$ $x = 8, y = 9$

185) _____

A) $\frac{19}{5}$

B) $\frac{57}{16}$

C) $\frac{45}{16}$

D) 3

Answer: D

Explanation: A)
 B)
 C)
 D)

Name the property illustrated by the statement.

186) $5 \cdot 1 = 5$

186) _____

A) distributive property

B) multiplicative inverse property

C) commutative property of multiplication

D) identity element for multiplication

Answer: D

Explanation: A)
 B)
 C)
 D)

Use the commutative and associative properties to simplify the expression.

187) $-8(4y)$

187) _____

A) $-32 + y$

B) $32y$

C) $-4y$

D) $-32y$

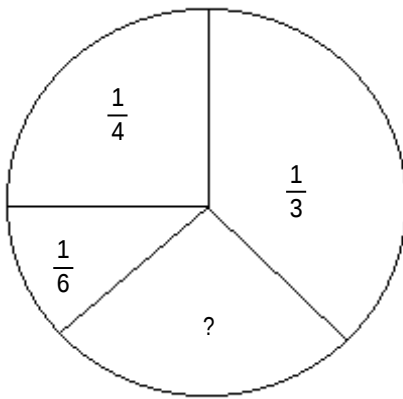
Answer: D

Explanation: A)
 B)
 C)
 D)

The circle represents a whole, or 1. Use subtraction to determine the unknown part of the circle.

188)

188) _____



A) $\frac{1}{2}$

B) $\frac{1}{3}$

C) $\frac{1}{4}$

D) $\frac{3}{4}$

Answer: C

Explanation: A)
B)
C)
D)

Evaluate.

189) -4^3

A) 12

B) 64

C) -12

D) -64

189) _____

Answer: D

Explanation: A)
B)
C)
D)

190) $\left(\frac{1}{4}\right)^2$

A) $\frac{1}{6}$

B) $\frac{1}{8}$

C) $\frac{1}{2}$

D) $\frac{1}{16}$

190) _____

Answer: D

Explanation: A)
B)
C)
D)

Insert <, >, or = to make the statement true.

191) $-|-12|$ _____ $-|-29|$

A) <

B) =

C) >

191) _____

Answer: C

Explanation: A)
B)
C)
D)

Evaluate the expression when $x = 5$, $y = -2$, and $t = 8$.

192) $|x + t - 4y|$

A) 5

B) 21

C) 29

D) 1

192) _____

Answer: B

Explanation: A)
B)
C)
D)

Use an associative property to complete the statement.

193) $(-5r) \cdot s =$ _____

A) $s \cdot (-5r)$

B) $(rs) \cdot (-5)$

C) $5 \cdot (-rs)$

D) $-5 \cdot (rs)$

193) _____

Answer: D

Explanation: A)
B)
C)
D)

Is the following statement true or false?

194) $20 > 19$

A) True

B) False

194) _____

Answer: A

Explanation: A)
B)

Find the additive inverse or opposite.

195) $|19|$

A) 19

B) 0

C) $\frac{1}{19}$

D) -19

195) _____

Answer: D

Explanation: A)
B)
C)
D)

Decide whether the given number is a solution of the given equation.

196) Is 2 a solution of $-9x + 3 = -15$?

A) no

B) yes

196) _____

Answer: B

Explanation: A)

B)

Name the property illustrated by the statement.

197) $8(x + 9) = 8x + 8 \cdot 9$

A) identity element for multiplication

B) commutative property of addition

C) distributive property

D) associative property of addition

197) _____

Answer: C

Explanation: A)

B)

C)

D)

Use a commutative property to complete the statement.

198) $9x + 10 =$ _____

A) $10 + 9x$

B) $10x + 9$

C) $-9x + 10$

D) $9x - 10$

198) _____

Answer: A

Explanation: A)

B)

C)

D)

Evaluate.

199) $(-11)^4$

A) -44

B) 14,641

C) -14,641

D) 1331

199) _____

Answer: B

Explanation: A)

B)

C)

D)

Insert $<$, $>$, or $=$ to make the statement true.

200) -7 _____ 0

A) $>$

B) $=$

C) $<$

200) _____

Answer: C

Explanation: A)

B)

C)

Use the distributive property to write the expression without parentheses. Then simplify, if necessary.

201) $-4(x + 7)$

A) $x - 28$

B) $-4x - 28$

C) $-4x + 7$

D) $-4x + 28$

201) _____

Answer: B

Explanation: A)
B)
C)
D)

Divide.

202) $\frac{8}{13} \div \left(-\frac{7}{10}\right)$

A) $-\frac{28}{65}$

B) $-\frac{80}{91}$

C) $\frac{80}{91}$

D) $\frac{91}{80}$

202) _____

Answer: B

Explanation: A)
B)
C)
D)

Simplify the expression.

203) $|-24| + |20 + 16|$

A) 64

B) 60

C) 12

D) 28

203) _____

Answer: B

Explanation: A)
B)
C)
D)

Evaluate the expression for the given replacement values.

204) $\frac{y + z - 3}{x}$ $x = 6, y = -9, z = 18$

A) 2

B) -1

C) 1

D) -2

204) _____

Answer: C

Explanation: A)
B)
C)
D)

Divide.

205) $-\frac{2}{3} \div \left(-\frac{4}{7}\right)$

205) _____

A) $-\frac{7}{6}$

B) $\frac{7}{6}$

C) $-\frac{8}{21}$

D) $\frac{6}{7}$

Answer: B

Explanation: A)
B)
C)
D)

Name the property illustrated by the statement.

206) $2 + (11 + 16) = (2 + 11) + 16$

206) _____

A) identity element for addition

B) commutative property of addition

C) associative property of addition

D) distributive property

Answer: C

Explanation: A)
B)
C)
D)

Solve. Simplify the answer.

207) June wants to work for $13\frac{1}{2}$ hours at her part-time job this week. She has already worked $3\frac{3}{4}$ hours. How many more hours does she need to work?

207) _____

A) $9\frac{3}{4}$ hr

B) $10\frac{3}{4}$ hr

C) $8\frac{3}{4}$ hr

D) 9 hr

Answer: A

Explanation: A)
B)
C)
D)

Add.

208) $26 + 14$

208) _____

A) 39

B) 40

C) 12

D) 41

Answer: B

Explanation: A)
B)
C)
D)

Write the sentence as an equation or inequality. Use x to represent any unknown number.

209) The sum of 14 and a number is 67.

A) $67 + 14 = x$

B) $14 + x = 67$

C) $14 = 67 + x$

D) $14 - x = 67$

209) _____

Answer: B

Explanation: A)

B)

C)

D)

Decide whether the given number is a solution of the given equation.

210) Is -6 a solution of $\frac{48}{x} = -8$?

A) no

B) yes

Answer: B

Explanation: A)

B)

If $x = -4$ and $y = -2$, evaluate the expression.

211) $x^2 + 2y$

A) 8

B) -8

C) -12

D) 12

211) _____

Answer: D

Explanation: A)

B)

C)

D)

Multiply or divide as indicated. Write the answer in lowest terms.

212) $5 \cdot 4\frac{8}{15}$

A) $21\frac{2}{3}$

B) $20\frac{8}{15}$

C) $22\frac{2}{3}$

D) 20

212) _____

Answer: C

Explanation: A)

B)

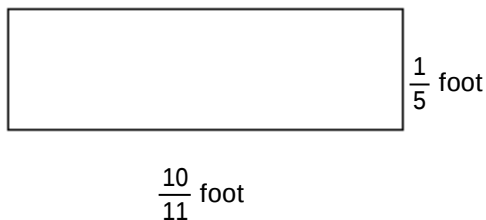
C)

D)

Find the area of the figure below. (The area of a rectangle is the product of its length and width. The area of a triangle is $\frac{1}{2}$ the product of its base and height.)

213)

213) _____



A) $\frac{10}{55}$ sq ft

B) $\frac{5}{8}$ sq ft

C) $\frac{2}{11}$ sq ft

D) $\frac{11}{16}$ sq ft

Answer: C

Explanation: A)
B)
C)
D)

Solve the problem.

214) An NFL football team was 37 yards from the goal when the following series of gains and losses occurred.

214) _____

Gains and Losses in Yards	
First Down	13
Second Down	-2
Third Down	-18
Fourth Down	19

During which down did the greatest gain of yardage occur?

A) first down

B) second down

C) third down

D) fourth down

Answer: D

Explanation: A)
B)
C)
D)

Add.

215) $-8.8 + (-2.9)$

215) _____

A) 5.9

B) -11.7

C) 11.7

D) -5.9

Answer: B

Explanation: A)
B)
C)
D)

Simplify the expression.

216) $\frac{|-12|}{-3}$

216) _____

A) -4

B) 4

C) -3

D) -5

Answer: A

Explanation: A)
B)
C)
D)

Multiply or divide as indicated. Write the answer in lowest terms.

217) $\frac{5}{7} \cdot \frac{1}{6}$

217) _____

A) $\frac{42}{5}$

B) $\frac{6}{13}$

C) $\frac{5}{42}$

D) $\frac{7}{30}$

Answer: C

Explanation: A)
B)
C)
D)

Add or subtract as indicated. Write the answer in lowest terms.

218) $12\frac{1}{4} - \frac{14}{20}$

218) _____

A) 11

B) $12\frac{11}{20}$

C) $10\frac{11}{20}$

D) $11\frac{11}{20}$

Answer: D

Explanation: A)
B)
C)
D)

Tell which set or sets the number belongs to: natural numbers, whole numbers, integers, rational numbers, irrational numbers, and real numbers.

219) 5.33

219) _____

A) natural, rational, real

B) real

C) rational, real

D) rational

Answer: C

Explanation: A)
B)
C)
D)

Add or subtract as indicated. Write the answer in lowest terms.

220) $8 - \frac{5}{6}$

220) _____

A) $\frac{5}{2}$

B) $\frac{53}{6}$

C) $\frac{1}{2}$

D) $\frac{43}{6}$

Answer: D

Explanation: A)
B)
C)
D)

Simplify.

221) $\frac{|7(-2)| - |1 - 3|}{|10(6)|}$

221) _____

A) $-\frac{4}{15}$

B) $-\frac{1}{5}$

C) $\frac{4}{15}$

D) $\frac{1}{5}$

Answer: D

Explanation: A)
B)
C)
D)

222) $\frac{-80}{7 + 9}$

222) _____

A) -5

B) 5

C) $\frac{-80}{7 - 9}$

D) 16

Answer: A

Explanation: A)
B)
C)
D)

Fill in the blank with one of the words or phrases listed below.

set	inequality symbols	opposites	absolute value	numerator
denominator	grouping symbols	exponent	base	reciprocals
variable	equation	solution		

223) Parentheses and brackets are examples of _____. 223) _____

A) opposites B) grouping symbols

C) reciprocals D) inequality symbols

Answer: B

Explanation: A)

B)

C)

D)

Divide.

224) $-\frac{2}{3} \div \frac{4}{3}$ 224) _____

A) $-\frac{1}{2}$ B) $\frac{8}{9}$ C) $\frac{1}{2}$ D) $-\frac{8}{9}$

Answer: A

Explanation: A)

B)

C)

D)

Find the additive inverse or opposite.

225) 0 225) _____

A) 1 B) -1

C) 0 D) no additive inverse or opposite

Answer: C

Explanation: A)

B)

C)

D)

Write the number as a product of primes.

226) 77 226) _____

A) $2 \cdot 7 \cdot 13$ B) $7 \cdot 11$ C) $7 \cdot 7 \cdot 11$ D) $7 \cdot 13$

Answer: B

Explanation: A)

B)

C)

D)

Write the fraction in lowest terms.

227) $\frac{34}{37}$

227) _____

A) $\frac{17}{18}$

B) $\frac{1}{37}$

C) $\frac{34}{37}$

D) $\frac{18}{17}$

Answer: C

Explanation: A)
B)
C)
D)

Tell which set or sets the number belongs to: natural numbers, whole numbers, integers, rational numbers, irrational numbers, and real numbers.

228) 0.3232...

228) _____

A) natural, rational, real

B) rational, real

C) real

D) irrational, real

Answer: B

Explanation: A)
B)
C)
D)

Use the distributive property to write the expression without parentheses. Then simplify, if necessary.

229) $\frac{1}{4}(12x - 8)$

229) _____

A) $3x - 2$

B) $48x - 32$

C) x

D) $3x - 8$

Answer: A

Explanation: A)
B)
C)
D)

Add.

230) $-1.5 + [0.7 + (-0.4) + 0.6]$

230) _____

A) 0.2

B) 2.4

C) -0.6

D) 3.4

Answer: C

Explanation: A)
B)
C)
D)

Write the sentence as an equation or inequality. Use x to represent any unknown number.

231) Three subtracted from a number is 0.

A) $3x = 0$

B) $x - 3 = 0$

C) $x + 3 = 0$

D) $3 - x = 0$

231) _____

Answer: B

Explanation: A)
B)
C)
D)

Use the distributive property to write the expression without parentheses. Then simplify, if necessary.

232) $-(-8m + 2n - 3p)$

A) $-8m + 2n - 3p$

B) $8m - 2n - 3p$

C) $-8m + 2n + 3p$

D) $8m - 2n + 3p$

232) _____

Answer: D

Explanation: A)
B)
C)
D)

Simplify the expression. (Remember the order of operations.)

233) $[14 - (-15)] - [13 + (-5)]$

A) -11

B) 21

C) -17

D) 17

233) _____

Answer: B

Explanation: A)
B)
C)
D)

Write the sentence as an equation or inequality. Use x to represent any unknown number.

234) The sum of 6 and twice a number is 34.

A) $6x - 2 = 34$

B) $6x + 2 = 34$

C) $6 + 2x = 34$

D) $34 + 2x = 6$

234) _____

Answer: C

Explanation: A)
B)
C)
D)

Multiply or divide as indicated. Write the answer in lowest terms.

235) $\frac{1}{2} \div \frac{5}{8}$

235) _____

A) $\frac{9}{10}$

B) $\frac{3}{5}$

C) $\frac{4}{5}$

D) $\frac{5}{16}$

Answer: C

Explanation: A)
B)
C)
D)

Subtract.

236) $-10 - (-10)$

236) _____

A) -10

B) 0

C) 1

D) 10

Answer: B

Explanation: A)
B)
C)
D)

237) $-13.8 - (-13.3)$

237) _____

A) 27.1

B) 0.5

C) -27.1

D) -0.5

Answer: D

Explanation: A)
B)
C)
D)

Decide whether the given number is a solution of the given equation.

238) Is 6 a solution of $2x + 5 = 19$?

238) _____

A) yes

B) no

Answer: B

Explanation: A)
B)

Insert $<$, $>$, or $=$ to make the statement true.

239) $0 \frac{3}{A} =$

239) _____

B) $>$

C) $<$

Answer: C

Explanation: A)
B)
C)

Simplify the expression.

240) $\frac{40(8 - 5) - 12}{3^2 - 3}$

240) _____

A) 36

B) 20

C) 21

D) 18

Answer: D

Explanation: A)
B)
C)
D)

Decide whether the statement is true or false.

241) The product of a positive integer and four negative integers is negative.

241) _____

A) True

B) False

Answer: B

Explanation: A)
B)

Provide an appropriate response.

242) Find the reciprocal of $-\frac{1}{20}$.

242) _____

A) 1

B) $\frac{1}{20}$

C) -20

D) 20

Answer: C

Explanation: A)
B)
C)
D)

Solve. Simplify the answer.

243) Erika spent $\frac{5}{6}$ of an hour on her computer visiting the history channel and the discovery channel

243) _____

websites. She spent $\frac{1}{5}$ of an hour at the history channel website. How many hours did she spend at the discovery channel website?

A) $\frac{19}{30}$ hr

B) $\frac{3}{5}$ hr

C) $\frac{2}{15}$ hr

D) $\frac{4}{5}$ hr

Answer: A

Explanation: A)
B)
C)
D)

Multiply.

244) $(-9)(-3)(3)$

A) -81

B) 181

C) 71

D) 81

244) _____

Answer: D

Explanation: A)
B)
C)
D)

Find the absolute value of the number.

245) $|15|$

A) -15

B) 30

C) 0

D) 15

245) _____

Answer: D

Explanation: A)
B)
C)
D)

Use an integer to represent the value in the statement.

246) \$1870 out of debt

A) 1870

B) -1870

246) _____

Answer: A

Explanation: A)
B)

Solve the problem.

247) The temperature at a mountain resort was a frigid 13 degrees below zero in the morning, but by noon it had risen 36 degrees. What was the temperature at noon?

A) -49°

B) 49°

C) -23°

D) 23°

247) _____

Answer: D

Explanation: A)
B)
C)
D)

Add or subtract as indicated. Write the answer in lowest terms.

248) $\frac{4}{8} - \frac{1}{8}$

A) $\frac{1}{2}$

B) $\frac{3}{4}$

C) $\frac{3}{16}$

D) $\frac{3}{8}$

248) _____

Answer: D

Explanation: A)
B)
C)
D)

Solve.

- 249) At the end of last year, Widgets Unlimited, Inc. posted a net income of -\$186.4 billion. If this continues, what would its income be after three years? 249) _____
- A) -\$559.2 billion B) -\$5592 billion C) -\$189.4 billion D) \$559.2 billion

Answer: A

Explanation: A)
B)
C)
D)

Divide.

- 250) $-\frac{81}{9}$ 250) _____
- A) 9 B) -10 C) -8 D) -9

Answer: D

Explanation: A)
B)
C)
D)

Add.

- 251) $-11 + 3$ 251) _____
- A) -14 B) 8 C) -8 D) 14

Answer: C

Explanation: A)
B)
C)
D)

Write the sentence as a mathematical statement.

- 252) Thirty-seven is not equal to negative thirty-seven. 252) _____
- A) $37 \neq -37$ B) $37 \geq -37$ C) $37 = -37$ D) $37 \leq -37$

Answer: A

Explanation: A)
B)
C)
D)

Find the opposite (additive inverse), and the reciprocal (multiplicative inverse). Assume that the value of an expression is not 0.

253) Expression: $-\frac{3}{8}$ Opposite: _____ Reciprocal: _____ 253) _____

A) Opposite: $-\frac{8}{3}$

B) Opposite: $\frac{3}{8}$

Reciprocal: $\frac{3}{8}$

Reciprocal: $-\frac{8}{3}$

C) Opposite: $\frac{3}{8}$

D) Opposite: $\frac{8}{3}$

Reciprocal: $\frac{8}{3}$

Reciprocal: $\frac{3}{8}$

Answer: B

Explanation: A)
 B)
 C)
 D)

Simplify the expression. (Remember the order of operations.)

254) $(8 - 3) - [(-12) - (-17)]$ 254) _____
A) 0 B) -24 C) -10 D) 6

Answer: A

Explanation: A)
 B)
 C)
 D)

Simplify the expression.

255) $\frac{8 + 10}{5 + 4}$ 255) _____
A) 18 B) $-\frac{2}{9}$ C) 2 D) -2

Answer: C

Explanation: A)
 B)
 C)
 D)

Evaluate the expression when $x = 5$, $y = -2$, and $t = 8$.

256) $\frac{|x + 13|}{5t}$

256) _____

A) $\frac{9}{20}$

B) $\frac{1}{5}$

C) $-\frac{21}{10}$

D) $\frac{13}{8}$

Answer: A

Explanation: A)
B)
C)
D)

Write the phrase as an algebraic expression. Let x represent the unknown number.

257) The product of a number and 18

257) _____

A) $\frac{x}{18}$

B) $x + 18$

C) $18x$

D) $x - 18$

Answer: C

Explanation: A)
B)
C)
D)

Solve. Simplify the answer.

258) A Boeing 767 flew 920 miles on a nonstop flight. On the return flight, it landed after having flown $530\frac{4}{9}$ miles. How far was the plane from its original point of departure?

258) _____

A) $389\frac{5}{9}$ mi

B) $389\frac{4}{9}$ mi

C) $390\frac{4}{9}$ mi

D) $390\frac{5}{9}$ mi

Answer: A

Explanation: A)
B)
C)
D)

Use the distributive property to write the expression without parentheses. Then simplify, if necessary.

259) $9(4r + 9 + 4s)$

259) _____

A) $36r + 81 + 4s$

B) $36r + 81 + 36s$

C) $36r + 9 + 4s$

D) $36r + 9 + 36s$

Answer: B

Explanation: A)
B)
C)
D)

Evaluate the expression for the given replacement values.

260) $\frac{y}{z} + 2x^2$ $x = 6, y = 16, z = 8$

260) _____

A) 74

B) 76

C) 38

D) 130

Answer: A

Explanation: A)
 B)
 C)
 D)

Find the additive inverse or opposite.

261) -11

261) _____

A) 11

B) $-\frac{1}{11}$

C) 0

D) -11

Answer: A

Explanation: A)
 B)
 C)
 D)

Add.

262) $\frac{1}{5} + \left(-\frac{1}{5}\right)$

262) _____

A) $\frac{2}{5}$

B) $\frac{4}{5}$

C) $-\frac{2}{5}$

D) 0

Answer: D

Explanation: A)
 B)
 C)
 D)

Add or subtract as indicated. Write the answer in lowest terms.

263) $\frac{19}{5} - 2$

263) _____

A) $\frac{17}{5}$

B) 17

C) $\frac{93}{5}$

D) $\frac{9}{5}$

Answer: D

Explanation: A)
 B)
 C)
 D)

Use an integer to represent the value in the statement.

264) a deduction of \$415.57 in your checkbook

A) -415.57

B) 415.57

264) _____

Answer: A

Explanation: A)
B)

Use a commutative property to complete the statement.

265) $cd =$ _____

A) $c + d$

B) $-cd$

C) $\frac{1}{cd}$

D) dc

265) _____

Answer: D

Explanation: A)
B)
C)
D)

Insert $<$, $>$, or $=$ to make the statement true.

266) -8.0 _____ 0.2

A) $<$

B) $=$

C) $>$

266) _____

Answer: A

Explanation: A)
B)
C)

267) -3 _____ -3

A) $>$

B) $=$

C) $<$

267) _____

Answer: B

Explanation: A)
B)
C)

Multiply or divide as indicated. Write the answer in lowest terms.

268) $1\frac{1}{7} \div \frac{1}{7}$

A) 7

B) 8

C) $6\frac{1}{2}$

D) 9

268) _____

Answer: B

Explanation: A)
B)
C)
D)

Write the phrase as an algebraic expression. Let x represent the unknown number.

269) Three times a number increased by 31

A) $31 - 3x$

B) $3x - 31$

C) $31x + 3$

D) $3x + 31$

269) _____

Answer: D

Explanation: A)
B)
C)
D)

Name the property illustrated by the statement.

270) $(5 + 5) + 1 = (5 + 5) + 1$

A) distributive property

B) additive inverse property

C) commutative property of addition

D) associative property of addition

270) _____

Answer: C

Explanation: A)
B)
C)
D)

Decide whether the given number is a solution of the given equation.

271) Is 8 a solution of $-6x - 2 = x + 6$?

A) no

B) yes

271) _____

Answer: A

Explanation: A)
B)

Solve the problem.

272) Allied Health Provider is a health insurance provider. In three consecutive recent years, it had net incomes of \$310 million, \$445 million, and -\$208 million. What was Allied Health Provider's total net income for these three years?

A) \$343 million

B) \$547 million

C) \$963 million

D) \$755 million

272) _____

Answer: B

Explanation: A)
B)
C)
D)

Evaluate.

273) $(-4)^3$

A) -12

B) -64

C) 12

D) 64

273) _____

Answer: B

Explanation: A)
B)
C)
D)

If $x = -4$ and $y = -2$, evaluate the expression.

274) $3x + 2y$

A) -16

B) 0

C) -14

D) -8

274) _____

Answer: A

Explanation: A)
B)
C)
D)

Simplify the expression. (Remember the order of operations.)

275) $-8 + 2 - 17$

A) 7

B) 23

C) -23

D) 11

275) _____

Answer: C

Explanation: A)
B)
C)
D)

Add or subtract as indicated. Write the answer in lowest terms.

276) $3\frac{2}{5} + 4\frac{6}{7}$

A) $4\frac{22}{35}$

B) $8\frac{9}{35}$

C) $2\frac{3}{7}$

D) $1\frac{1}{4}$

276) _____

Answer: B

Explanation: A)
B)
C)
D)

Tell whether the statement is true or false.

277) Every integer is an irrational number.

A) True

B) False

277) _____

Answer: B

Explanation: A)
B)

Solve.

278) On part of a scenic tour of underground caves, Dave and Neil started at an elevation of - 58 feet. They then rose 11 feet. What was their elevation at this point?

278) _____

A) -47 ft

B) 47 ft

C) 69 ft

D) -69 ft

Answer: A

Explanation: A)
B)
C)
D)

Decide whether the given number is a solution of the given equation.

279) Is -1 a solution of $x - 8 = 4$?

A) yes

B) no

Answer: B

Explanation: A)
B)

279) _____

Simplify the expression. (Remember the order of operations.)

280) $|-3| - 5^2 - (-8 - 9)$

A) -39

B) -23

C) -5

D) -11

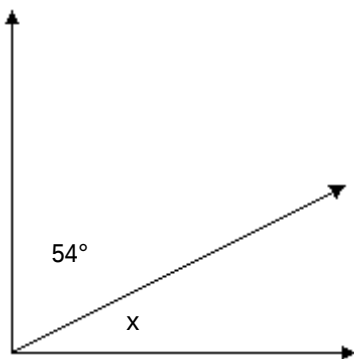
Answer: C

Explanation: A)
B)
C)
D)

280) _____

Find the unknown complementary or supplementary angle.

281)



A) 36°

B) 31°

C) 26°

D) 46°

Answer: A

Explanation: A)
B)
C)
D)

281) _____

Find the additive inverse or opposite.

282) 24

A) 0

B) -24

C) $\frac{1}{24}$

D) 24

Answer: B

Explanation: A)
B)
C)
D)

282) _____

Write the sentence as a mathematical statement.

283) Eighteen is greater than three.

A) $18 \geq 3$

B) $18 = 3$

C) $18 > 3$

D) $18 < 3$

283) _____

Answer: C

Explanation: A)
B)
C)
D)

Multiply or divide as indicated. Write the answer in lowest terms.

284) $4\frac{4}{7} \div 8$

A) $\frac{3}{7}$

B) $\frac{2}{3}$

C) $\frac{4}{7}$

D) $\frac{5}{7}$

284) _____

Answer: C

Explanation: A)
B)
C)
D)

285) $\frac{6}{19} \div \frac{6}{13}$

A) $\frac{11}{19}$

B) $\frac{13}{19}$

C) $\frac{13}{17}$

D) $\frac{12}{19}$

285) _____

Answer: B

Explanation: A)
B)
C)
D)

286) $\frac{5}{6} \cdot \frac{2}{9}$

A) $5\frac{2}{5}$

B) $\frac{4}{15}$

C) $3\frac{3}{4}$

D) $\frac{5}{27}$

286) _____

Answer: D

Explanation: A)
B)
C)
D)

Decide whether the given number is a solution of the given equation.

287) Is 4 a solution of $6x - 5 = 47 - 7x$?

287) _____

A) yes

B) no

Answer: A

Explanation: A)
B)

Fill in the blank with one of the words or phrases listed below.

set	inequality symbols	opposites	absolute value	numerator
denominator	grouping symbols	exponent	base	reciprocals
variable	equation	solution		

288) The number in a fraction above the fraction bar is called the _____.

288) _____

A) base

B) exponent

C) denominator

D) numerator

Answer: D

Explanation: A)
B)
C)
D)

Solve the problem.

289) Noah Field decided to sell 260 shares of stock, which decreased in value by \$3.50 per share yesterday. How much money did he lose?

289) _____

A) \$256.50

B) \$1820

C) \$4550

D) \$910

Answer: D

Explanation: A)
B)
C)
D)

Evaluate the expression for the given replacement values.

290) $(x + 2y)^2$ $x = 3, y = 4$

290) _____

A) 121

B) 22

C) 11

D) 25

Answer: A

Explanation: A)
B)
C)
D)

Simplify the expression.

291) $\frac{-12 + 8 \cdot 9}{3}$

291) _____

A) 20

B) 28

C) -20

D) -12

Answer: A

Explanation: A)
B)
C)
D)

Multiply or divide as indicated. Write the answer in lowest terms.

292) $1\frac{1}{6} \cdot \frac{4}{5}$

292) _____

A) $1\frac{14}{15}$

B) $\frac{14}{15}$

C) $1\frac{4}{30}$

D) $\frac{12}{15}$

Answer: B

Explanation: A)
B)
C)
D)

List the numbers in set B that belong to the indicated set.

293) $B = \left\{ 14, \sqrt{8}, -2, 0, \frac{0}{9}, 2\pi, \sqrt{4} \right\}$

293) _____

Integers

A) 14, -2, 0, $\frac{0}{9}, \sqrt{4}$

B) 14, 0, $\sqrt{4}, 2\pi$

C) 14, 0

D) 14, -2, 0

Answer: A

Explanation: A)
B)
C)
D)

Name the property illustrated by the statement.

294) $2 + 5 = 5 + 2$

294) _____

A) distributive property

B) associative property of addition

C) identity element for addition

D) commutative property of addition

Answer: D

Explanation: A)
B)
C)
D)

Solve. Simplify the answer.

295) Last week, Samantha ran 24 miles. This week, she ran $22\frac{3}{4}$ miles. How much more did she run 295) _____

last week?

A) $46\frac{3}{4}$ mi

B) $1\frac{1}{4}$ mi

C) $1\frac{29}{91}$ mi

D) $28\frac{3}{4}$ mi

Answer: B

Explanation: A)

B)

C)

D)

Decide whether the given number is a solution of the given equation.

296) Is -4 a solution of $-6 - x = -2$? 296) _____

A) yes

B) no

Answer: A

Explanation: A)

B)

Simplify.

297) $\frac{|3 - 5^2| - 6}{3 - 2}$ 297) _____

A) - 28

B) 28

C) 16

D) - 2

Answer: C

Explanation: A)

B)

C)

D)

Evaluate.

298) $(-10)^2$ 298) _____

A) -20

B) 20

C) -100

D) 100

Answer: D

Explanation: A)

B)

C)

D)

Translate the phrase to an expression and simplify.

299) Subtract -3 from 2.

A) -1

B) -5

C) 1

D) 5

299) _____

Answer: D

Explanation: A)
B)
C)
D)

Solve.

300) Mariel the Magician died in the year 24 A.D. at the age of 69. In what year was she born?

A) 45 B.C.

B) 93 A.D.

C) 45 A.D.

D) 93 B.C.

300) _____

Answer: A

Explanation: A)
B)
C)
D)

Simplify the expression.

301) $12 + 23 \cdot 11$

A) 46

B) 385

C) 287

D) 265

301) _____

Answer: D

Explanation: A)
B)
C)
D)

Insert $<$, $>$, or $=$ to make the statement true.

302) $|-2|$ _____ $|-12|$

A) =

B) $<$

C) $>$

302) _____

Answer: B

Explanation: A)
B)
C)

Fill in the blank with one of the words or phrases listed below.

set	inequality symbols	opposites	absolute value	numerator
denominator	grouping symbols	exponent	base	reciprocals
variable	equation	solution		

303) The number in a fraction below the fraction bar is called the _____.

303) _____

A) exponent

B) denominator

C) base

D) numerator

Answer: B

Explanation: A)

B)

C)

D)

Multiply or divide as indicated. Write the answer in lowest terms.

304) $\frac{4}{9} \div \frac{9}{5}$

304) _____

A) $\frac{20}{81}$

B) $4\frac{1}{20}$

C) $\frac{4}{5}$

D) $1\frac{1}{4}$

Answer: A

Explanation: A)

B)

C)

D)

Evaluate the expression when $x = 2$, $y = 1$, and $z = 4$.

305) $5x + 6$

305) _____

A) 40

B) 16

C) 17

D) 60

Answer: B

Explanation: A)

B)

C)

D)

If $x = -4$ and $y = -2$, evaluate the expression.

306) $\frac{10 - 5x}{y + 2}$

306) _____

A) $-\frac{15}{2}$

B) 0

C) $\frac{5}{2}$

D) undefined

Answer: D

Explanation: A)

B)

C)

D)

Use the commutative and associative properties to simplify the expression.

307) $\frac{4}{3}\left(\frac{3}{4}t\right)$

307) _____

A) $\frac{16}{9}t$

B) t

C) $\frac{3}{4}t$

D) $\frac{25}{12}t$

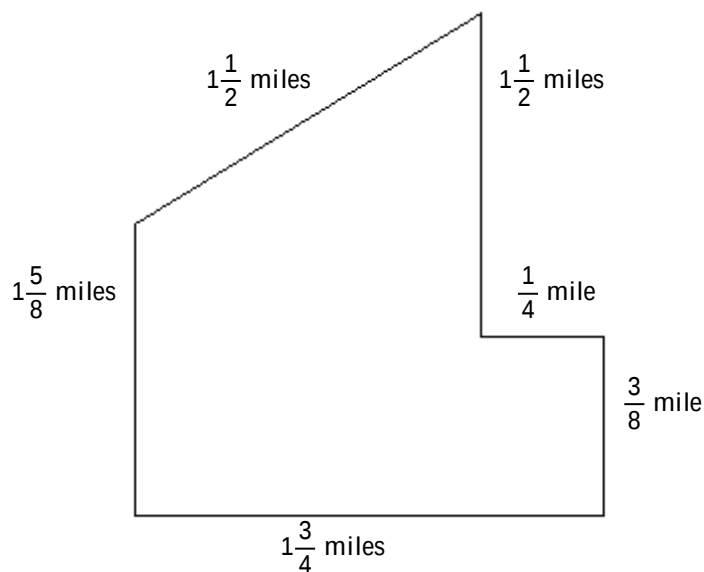
Answer: B

Explanation: A)
B)
C)
D)

The perimeter of a plane figure is the total distance around the figure. Find the perimeter of the figure.

308)

308) _____



A) $5\frac{3}{4}$ miles

B) $5\frac{1}{2}$ miles

C) 7 miles

D) $3\frac{3}{4}$ miles

Answer: C

Explanation: A)
B)
C)
D)

Write the phrase as an algebraic expression. Let x represent the unknown number.

309) The quotient of 17 and a number

309) _____

A) $x - 17$

B) $17x$

C) $\frac{17}{x}$

D) $\frac{x}{17}$

Answer: C

Explanation: A)
B)
C)
D)

Write the sentence as an equation or inequality. Use x to represent any unknown number.

310) The difference of twelve and three is greater than seven.

310) _____

A) $3 - 12 < 7$

B) $12 - 3 < 7$

C) $3 - 12 > 7$

D) $12 - 3 > 7$

Answer: D

Explanation: A)
B)
C)
D)

Solve.

311) A bike road race starts at an elevation of 700 feet and passes through 5 stages where the elevation changes by 92 feet, -80 feet, -556 feet, 309 feet, and -444 feet. At what elevation does the race end?

311) _____

A) 553 ft

B) 21 ft

C) 2181 ft

D) -2181 ft

Answer: B

Explanation: A)
B)
C)
D)

Evaluate.

312) $(0.6)^2$

312) _____

A) 0.3

B) 36

C) 1.2

D) 0.36

Answer: D

Explanation: A)
B)
C)
D)

Simplify the expression. (Remember the order of operations.)

313) $-19 + 18 - 16 + (-7)$

313) _____

A) -28

B) -10

C) 8

D) -24

Answer: D

Explanation: A)
B)
C)
D)

Simplify the expression.

314) $(12 + 3) \cdot (20 - 13)$

A) 2.14

B) 105

C) 287

D) 22

314) _____

Answer: B

Explanation: A)
B)
C)
D)

315) $9^2 - 5 \cdot 6$

A) 216

B) 456

C) 96

D) 51

315) _____

Answer: D

Explanation: A)
B)
C)
D)

Write the fraction in lowest terms.

316) $\frac{70}{80}$

A) $\frac{10}{8}$

B) $\frac{70}{80}$

C) $\frac{7}{10}$

D) $\frac{7}{8}$

316) _____

Answer: D

Explanation: A)
B)
C)
D)

Fill in the blank with one of the words or phrases listed below.

set	inequality symbols	opposites	absolute value	numerator
denominator	grouping symbols	exponent	base	reciprocals
variable	equation	solution		

317) The symbols $\neq$, $<$, and $>$ are called _____.

A) reciprocals

B) inequality symbols

C) opposites

D) grouping symbols

317) _____

Answer: B

Explanation: A)
B)
C)
D)

Divide.

318) $\frac{0}{-66}$

318) _____

A) 1

B) 0

C) 66

D) undefined

Answer: B

Explanation: A)
B)
C)
D)

319) $-\frac{1}{5} \div \frac{1}{5}$

319) _____

A) -5

B) $-\frac{1}{5}$

C) 5

D) -1

Answer: D

Explanation: A)
B)
C)
D)

Write the number as a product of primes.

320) 12

320) _____

A) $3 \cdot 3$

B) $6 \cdot 2$

C) $2 \cdot 2 \cdot 3$

D) $4 \cdot 3$

Answer: C

Explanation: A)
B)
C)
D)

Use the distributive property to write the expression without parentheses. Then simplify, if necessary.

321) $9(x + 7y + 4)$

321) _____

A) $9x + 7y + 4$

B) $9x - 63y - 36$

C) $9x + 63y + 36$

D) $9x + 63y + 4$

Answer: C

Explanation: A)
B)
C)
D)

Solve the problem.

322) At Relax Resort, the Beginner's Trail is 2 kilometers long. The Advanced Trail is 19 kilometers long. Write an inequality statement using $\leq$ or $\geq$ comparing the numbers 2 and 19.

322) _____

A) $2 \leq 19$

B) $2 \geq 19$

Answer: A

Explanation: A)
B)

Multiply.

323) $8(-3)$

A) -48

B) -24

C) 24

D) -14

323) _____

Answer: B

Explanation: A)
B)
C)
D)

Solve. Simplify the answer.

324) The front cover of a book measures $8\frac{1}{2}$ inches by $6\frac{3}{5}$ inches. What is the total distance around

324) _____

(the perimeter of) the front cover of the book?

A) $29\frac{3}{5}$ in.

B) $30\frac{1}{5}$ in.

C) $15\frac{1}{10}$ in.

D) $29\frac{2}{5}$ in.

Answer: B

Explanation: A)
B)
C)
D)

Simplify the expression.

325) $-10 - (-4)$

A) 6

B) -6

C) 14

D) -14

325) _____

Answer: B

Explanation: A)
B)
C)
D)

Subtract.

326) $\frac{5}{9} - \frac{1}{5}$

326) _____

A) $\frac{4}{9}$

B) $\frac{16}{9}$

C) $\frac{16}{45}$

D) $\frac{4}{45}$

Answer: C

Explanation: A)
B)
C)
D)

Evaluate.

327) $(-1)^4$

A) -1

B) 1

C) 4

D) -4

327) _____

Answer: B

Explanation: A)
B)
C)
D)

Multiply or divide as indicated. Write the answer in lowest terms.

328) $\frac{2}{13} \div \frac{1}{13}$

A) $\frac{3}{26}$

B) $\frac{2}{169}$

C) $\frac{2}{1}$

D) $84\frac{1}{2}$

328) _____

Answer: C

Explanation: A)
B)
C)
D)

Solve.

329) At the start of a chemistry experiment, Sarah measured the temperature of a liquid to be -14°C . At the end of the experiment, it had risen 25°C . What was the liquid's temperature at the end of the experiment?

A) -39°C

B) 11°C

C) -11°C

D) 39°C

329) _____

Answer: B

Explanation: A)
B)
C)
D)

Add or subtract as indicated. Write the answer in lowest terms.

330) $\frac{13}{14} - \frac{3}{14}$

A) $\frac{5}{7}$

B) $\frac{10}{14}$

C) $\frac{10}{0}$

D) $\frac{10}{28}$

330) _____

Answer: A

Explanation: A)
B)
C)
D)

Divide.

331) $-\frac{20}{5}$

331) _____

A) 4

B) -4

C) -5

D) -3

Answer: B

Explanation: A)
B)
C)
D)

Tell which set or sets the number belongs to: natural numbers, whole numbers, integers, rational numbers, irrational numbers, and real numbers.

332) $-\sqrt{17}$

332) _____

A) whole, real

B) integer, real

C) rational, real

D) irrational, real

Answer: D

Explanation: A)
B)
C)
D)

Add.

333) $6 + (-12)$

333) _____

A) -72

B) -6

C) 6

D) 18

Answer: C

Explanation: A)
B)
C)
D)

Add or subtract as indicated. Write the answer in lowest terms.

334) $\frac{2}{9} + \frac{2}{3} - \frac{1}{6}$

334) _____

A) $\frac{19}{9}$

B) $\frac{19}{18}$

C) $\frac{13}{18}$

D) $\frac{13}{9}$

Answer: C

Explanation: A)
B)
C)
D)

Write the sentence as an equation or inequality. Use x to represent any unknown number.

335) Four minus seven times a number is 45.

A) $7x - 4 = 45$

B) $4x - 7 = 45$

C) $7 - 4x = 45$

D) $4 - 7x = 45$

335) _____

Answer: D

Explanation: A)
B)
C)
D)

Write the phrase as an algebraic expression. Let x represent the unknown number.

336) Two-fifths times a number

A) $x - \frac{2}{5}$

B) $\frac{2}{5} + x$

C) $\frac{2}{5} - x$

D) $\frac{2}{5}x$

336) _____

Answer: D

Explanation: A)
B)
C)
D)

Fill in the blank with one of the words or phrases listed below.

set	inequality symbols	opposites	absolute value	numerator
denominator	grouping symbols	exponent	base	reciprocals
variable	equation	solution		

337) A mathematical statement that two expressions are equal is called a(n) _____.

A) inequality symbols

B) exponent

C) absolute value

D) equation

337) _____

Answer: D

Explanation: A)
B)
C)
D)

Use an associative property to complete the statement.

338) $3 \cdot (yz) =$ _____

A) $(yz) \cdot 3$

B) $(3y) \cdot z$

C) $3 \cdot (zy)$

D) $3 + (yz)$

338) _____

Answer: B

Explanation: A)
B)
C)
D)

Decide whether the given number is a solution of the given equation.

339) Is 3 a solution of $-x - 7 = -10$?

339) _____

A) yes

B) no

Answer: A

Explanation: A)
B)

Simplify the expression.

340) $\frac{|-3| + 2}{9 - 3}$

340) _____

A) $\frac{5}{6}$

B) $\frac{2}{9}$

C) $-\frac{5}{6}$

D) $-\frac{1}{6}$

Answer: A

Explanation: A)
B)
C)
D)

Fill in the blank with one of the words or phrases listed below.

set	inequality symbols	opposites	absolute value	numerator
denominator	grouping symbols	exponent	base	reciprocals
variable	equation	solution		

341) The _____ of a number is the distance between that number and 0 on the number line.

341) _____

A) exponent

B) absolute value

C) solution

D) base

Answer: B

Explanation: A)
B)
C)
D)

Is the following statement true or false?

342) $20 \geq 6$

342) _____

A) True

B) False

Answer: A

Explanation: A)
B)

Simplify the expression.

$$343) -5\frac{5}{7} + 20\frac{11}{21}$$

343) _____

A) $16\frac{5}{21}$

B) $-5\frac{4}{21}$

C) $24\frac{17}{21}$

D) $14\frac{17}{21}$

Answer: D

Explanation: A)
B)
C)
D)

Tell which set or sets the number belongs to: natural numbers, whole numbers, integers, rational numbers, irrational numbers, and real numbers.

$$344) 0$$

344) _____

A) whole, integer, rational, real

B) integer, real

C) rational, real

D) whole, real

Answer: A

Explanation: A)
B)
C)
D)

Fill in the blank with one of the words or phrases listed below.

set	inequality symbols	opposites	absolute value	numerator
denominator	grouping symbols	exponent	base	reciprocals
variable	equation	solution		

345) A _____ is a collection of objects

345) _____

A) base

B) variable

C) solution

D) set

Answer: D

Explanation: A)
B)
C)
D)

Insert <, >, or = to make the statement true.

$$346) |-3| \underline{\hspace{1cm}} 0$$

346) _____

A) >

B) =

C) <

Answer: A

Explanation: A)
B)
C)

Simplify the expression.

347) $5[5 + 6(8 + 5)]$

A) 415

B) 711

C) 103

D) 715

347) _____

Answer: A

Explanation: A)
B)
C)
D)

Insert $<$, $>$, or $=$ to make the statement true.

348) $|-2|$ _____ $|1|$

A) $=$

B) $<$

C) $>$

348) _____

Answer: C

Explanation: A)
B)
C)

List the numbers in set B that belong to the indicated set.

349) $B = \left\{ 8, \sqrt{8}, -23, 0, \frac{0}{7}, \sqrt{4}, \frac{-3}{0}, 2\pi, 0.15 \right\}$

Irrational numbers

A) $\sqrt{8}, \sqrt{4}, 0.15, 2\pi$

B) $\sqrt{8}, \frac{-3}{0}, 2\pi$

C) $\sqrt{8}, \sqrt{4}$

D) $\sqrt{8}, 2\pi$

349) _____

Answer: D

Explanation: A)
B)
C)
D)

Tell whether the statement is true or false.

350) Every rational number is an integer.

A) True

B) False

350) _____

Answer: B

Explanation: A)
B)

Subtract.

351) $0.62 - (-0.01)$

A) 0.0062

B) 0.63

C) 0.61

D) 0.73

351) _____

Answer: B

Explanation: A)
B)
C)
D)

Simplify the expression. (Remember the order of operations.)

352) $8 - 0 - 16 - (-14) + (-19)$

A) -41

B) -13

C) -9

D) 29

352) _____

Answer: B

Explanation: A)
B)
C)
D)

Simplify the expression.

353) $8 \cdot 7 - 7$

A) 63

B) 0

C) 49

D) 392

353) _____

Answer: C

Explanation: A)
B)
C)
D)

Simplify.

354) $- (-19)$

A) $\frac{1}{19}$

B) -19

C) 1

D) 19

354) _____

Answer: D

Explanation: A)
B)
C)
D)

Multiply.

355) $(-3)(-6)(-5)$

A) 10

B) 90

C) -100

D) -90

355) _____

Answer: D

Explanation: A)
B)
C)
D)

Solve.

356) In four rounds of a card game, you get scores of -2, -8, -3, and 5. What is your final score?

356) _____

A) -14

B) 8

C) -8

D) 14

Answer: C

Explanation: A)

B)

C)

D)

357) Chris lost \$5.29 playing poker in one week. If this continued, what would be his net winnings or losses after five weeks?

357) _____

A) \$26.45

B) -\$2645.00

C) -\$26.45

D) -\$264.50

Answer: C

Explanation: A)

B)

C)

D)

Write the fraction in lowest terms.

358) $\frac{2}{5}$

358) _____

A) $\frac{2}{5}$

B) $\frac{1}{5}$

C) $\frac{1}{3}$

D) $\frac{1}{2}$

Answer: A

Explanation: A)

B)

C)

D)

Multiply.

359) $-2.1(-14)$

359) _____

A) -11.9

B) 29.4

C) 16.1

D) -16.1

Answer: B

Explanation: A)

B)

C)

D)

Add or subtract as indicated. Write the answer in lowest terms.

360) $\frac{1}{9} + \frac{8}{9}$

360) _____

A) $\frac{1}{2}$

B) 1

C) $\frac{9}{18}$

D) $\frac{9}{9}$

Answer: B

Explanation: A)
B)
C)
D)

List the numbers in set B that belong to the indicated set.

361) $B = \left\{ 4, \sqrt{7}, -10, 0, \frac{0}{1}, 2\pi, \sqrt{4} \right\}$

361) _____

Whole numbers

A) 4, 0, $\frac{0}{1}, \sqrt{4}$

B) 4, -10, 0

C) 4, 0

D) 4, -10, 0, $\sqrt{4}, 2\pi$

Answer: A

Explanation: A)
B)
C)
D)

Write the fraction as an equivalent fraction with the given denominator.

362) $\frac{3}{4}$ with a denominator of 8

362) _____

A) $\frac{6}{8}$

B) $\frac{2}{8}$

C) $\frac{12}{8}$

D) $\frac{3}{8}$

Answer: A

Explanation: A)
B)
C)
D)

363) $\frac{11}{6}$ with a denominator of 18

363) _____

A) $\frac{33}{18}$

B) $\frac{3}{18}$

C) $\frac{11}{18}$

D) $\frac{66}{18}$

Answer: A

Explanation: A)
B)
C)
D)

Divide.

364) $\frac{7}{8} \div \left(-\frac{7}{8}\right)$

364) _____

A) 8

B) $-\frac{8}{7}$

C) -1

D) $-\frac{7}{8}$

Answer: C

Explanation: A)
B)
C)
D)

Insert <, >, or = to make the statement true.

365) $0 \underline{\hspace{1cm}} |-21|$
A) <

B) =

C) >

365) _____

Answer: A

Explanation: A)
B)
C)

Solve. Simplify the answer.

366) Angie is wrapping a present for her nephew. She has a roll of wrapping paper that has 12 feet of wrapping paper on the roll. She uses $3\frac{7}{9}$ feet to wrap the present. How many feet of wrapping paper are left on the roll?

366) _____

A) $8\frac{2}{9}$ ft

B) $11\frac{2}{9}$ ft

C) $9\frac{7}{9}$ ft

D) $9\frac{2}{9}$ ft

Answer: A

Explanation: A)
B)
C)
D)

Insert <, >, or = to make the statement true.

367) $-67 \underline{\hspace{1cm}} -48$
A) >

B) =

C) <

367) _____

Answer: C

Explanation: A)
B)
C)

Use the distributive property to write the sum as a product.

368) $(-8)a + (-8)q$

A) $8(a - q)$

B) $8(a + q)$

C) $-8(a + q)$

D) $-8(a - q)$

368) _____

Answer: C

Explanation: A)
B)
C)
D)

Use the commutative and associative properties to simplify the expression.

369) $3 + (4x - 6)$

A) $-3x - 6$

B) $-18 + 4x$

C) $-6x$

D) $-3 + 4x$

369) _____

Answer: D

Explanation: A)
B)
C)
D)

Solve. Simplify the answer.

370) Chris rode her bicycle $6\frac{3}{5}$ miles on Tuesday. On Thursday, she rode $7\frac{1}{4}$ miles. What was her total biking distance for those two days?

A) $13\frac{17}{20}$ mi

B) $14\frac{17}{20}$ mi

C) $12\frac{17}{20}$ mi

D) $6\frac{17}{20}$ mi

370) _____

Answer: A

Explanation: A)
B)
C)
D)

Subtract.

371) $7 - (-4)$

A) -11

B) -3

C) 11

D) 3

371) _____

Answer: C

Explanation: A)
B)
C)
D)

Decide whether the given number is a solution of the given equation.

372) Is 15 a solution of $x + 7 = 22$?

A) yes

B) no

372) _____

Answer: A

Explanation: A)
B)

Is the following statement true or false?

373) $-8 < 0$

A) True

B) False

373) _____

Answer: A

Explanation: A)
B)

Write the sentence as a mathematical statement.

374) Twenty-one is less than or equal to twenty-one.

A) $21 = 21$

B) $21 < 21$

C) $21 \leq 21$

D) $21 \geq 21$

374) _____

Answer: C

Explanation: A)
B)
C)
D)

Use the distributive property to write the expression without parentheses. Then simplify, if necessary.

375) $-3(-6x - 9)$

A) $18x + 27$

B) $18x - 27$

C) $45x$

D) $-18x - 27$

375) _____

Answer: A

Explanation: A)
B)
C)
D)

Evaluate the expression for the given replacement values.

376) $\frac{13x - 8y}{5}$ $x = 6, y = 2$

A) 14

B) $\frac{62}{5}$

C) $\frac{94}{5}$

D) $\frac{22}{5}$

376) _____

Answer: B

Explanation: A)
B)
C)
D)

Simplify the expression.

377) $4^3 + 11^2$

A) 133

B) 34

C) 185

D) 86

377) _____

Answer: C

Explanation: A)
B)
C)
D)

Use a commutative property to complete the statement.

378) $-13 \cdot x =$ _____

A) $x \cdot (-13)$

B) $13 - x$

C) $13 \cdot x$

D) $x - (13)$

378) _____

Answer: A

Explanation: A)
B)
C)
D)

Evaluate the expression for the given replacement values.

379) Neglecting air resistance, the expression $16t^2$ gives the distance in feet an object will fall in t seconds. Complete the chart below.

379) _____

Time t (in seconds)	Distance $16t^2$ (in feet)
0	
2	
4	

A)

Time t (in seconds)	Distance $16t^2$ (in feet)
0	0
2	32
4	64

C)

Time t (in seconds)	Distance $16t^2$ (in feet)
0	16
2	144
4	400

B)

Time t (in seconds)	Distance $16t^2$ (in feet)
0	0
2	16
4	64

D)

Time t (in seconds)	Distance $16t^2$ (in feet)
0	0
2	64
4	256

Answer: D

Explanation: A)
B)
C)
D)

Tell whether the statement is true or false.

380) $\frac{1}{4}$ is an integer.

380) _____

A) True

B) False

Answer: B

Explanation: A)
B)

Solve.

- 381) Trader Tower stands at 2811 feet high. Exchange Emporium is 819 feet tall. How much taller is Trader Tower than Exchange Emporium? 381) _____
- A) -3630 feet B) 1992 feet C) -1992 feet D) 3630 feet

Answer: B

Explanation: A)
B)
C)
D)

Insert <, >, or = to make the statement true.

- 382) $2 \frac{\quad}{\quad} 0$ 382) _____
- A) < B) = C) >

Answer: C

Explanation: A)
B)
C)

Simplify the expression.

- 383) $[26 - (4 + 6) \div 2] - [1 + 18 \div 3]$ 383) _____
- A) 9 B) 14 C) 21 D) 11

Answer: B

Explanation: A)
B)
C)
D)

Subtract.

- 384) $-\frac{4}{5} - \frac{7}{10}$ 384) _____
- A) $-\frac{3}{10}$ B) $-\frac{11}{10}$ C) $-\frac{3}{2}$ D) $\frac{3}{2}$

Answer: C

Explanation: A)
B)
C)
D)

Simplify the expression. (Remember the order of operations.)

385) $16 - (-14) + 21 + (-12)$

A) 3

B) -35

C) 35

D) 39

385) _____

Answer: D

Explanation: A)

B)

C)

D)

List the numbers in set B that belong to the indicated set.

386) $B = \left\{ 4, \sqrt{7}, -7, 0, \frac{0}{4}, 2\pi, \sqrt{4} \right\}$

386) _____

Natural numbers

A) 4, 0, $\sqrt{4}$

B) 4, 0

C) 4, 0, $\frac{0}{7}$

D) 4, $\sqrt{4}$

Answer: D

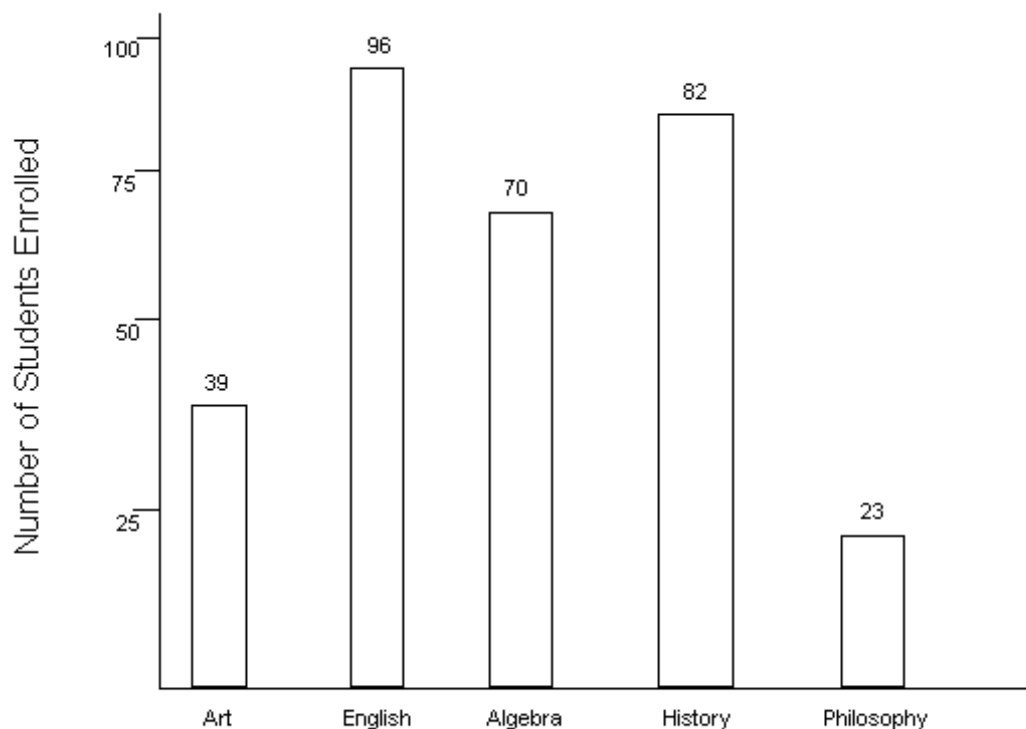
Explanation: A)

B)

C)

D)

The graph below shows the number of students enrolled in various courses at State University in spring 2000. Each bar represents a different course, and the height of the bar represents the number of students enrolled. Use the graph to answer the question.



387) For which courses was enrollment less than 75?

A) Algebra and Philosophy

B) Art and Philosophy

C) Art, Algebra, History, and Philosophy

D) Art, Algebra, and Philosophy

387) _____

Answer: D

Explanation: A)
B)
C)
D)

Evaluate the expression when $x = 2$, $y = 1$, and $z = 4$.

388) $\frac{y}{2x}$

A) $\frac{1}{4}$

B) 4

C) $\frac{y}{4}$

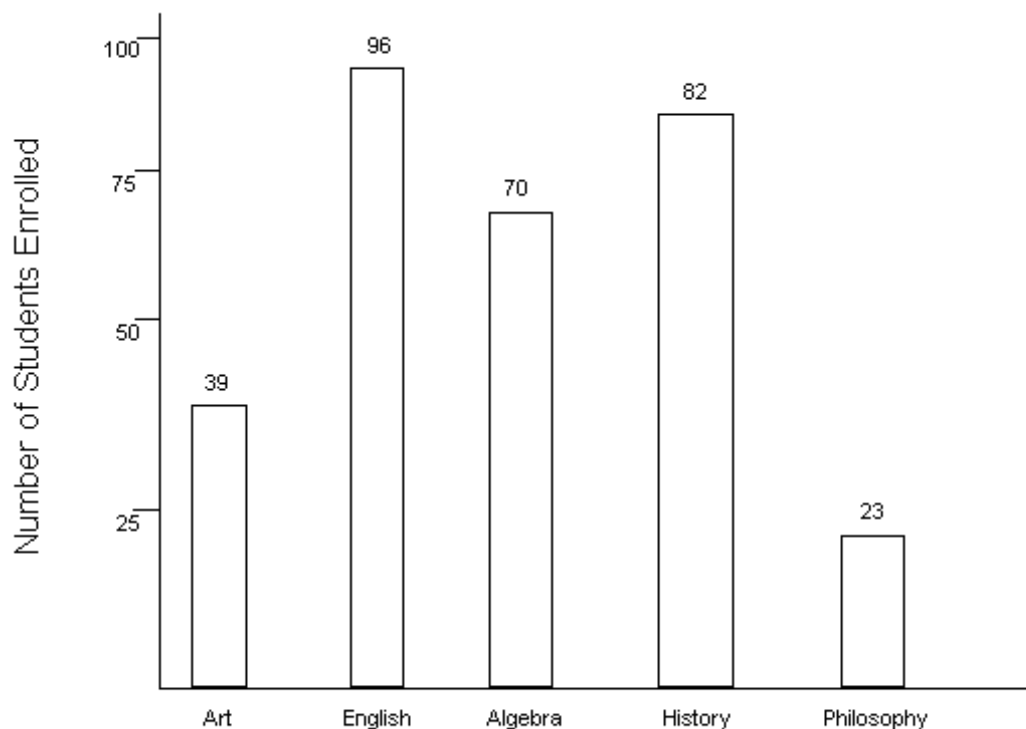
D) 1

388) _____

Answer: A

Explanation: A)
B)
C)
D)

The graph below shows the number of students enrolled in various courses at State University in spring 2000. Each bar represents a different course, and the height of the bar represents the number of students enrolled. Use the graph to answer the question.



389) Write an inequality statement using $<$ or $>$ comparing the number of students enrolled in Algebra and History. 389) _____

- A) $70 \geq 82$ B) $70 > 82$ C) $70 < 82$ D) $70 \leq 82$

Answer: C

Explanation: A)
B)
C)
D)

Use an integer to represent the value in the statement.

390) a decrease of 108 feet in elevation 390) _____

- A) -108 B) 108

Answer: A

Explanation: A)
B)

Solve. Simplify the answer.

391) Nils walked $\frac{1}{24}$ of a mile to his biology class, $\frac{3}{24}$ of a mile to his art class, $\frac{6}{24}$ of a mile to his calculus class, and then back to his dormitory. If he walked 1 mile altogether, how far did he walk from his calculus class to his dormitory? 391) _____

- A) $\frac{5}{6}$ mi B) $\frac{7}{12}$ mi C) $\frac{17}{24}$ mi D) $\frac{5}{12}$ mi

Answer: B

Explanation: A)
B)
C)
D)

Provide an appropriate response.

392) Find the opposite of -12. 392) _____

- A) 12 B) 0 C) -12 D) $-\frac{1}{12}$

Answer: A

Explanation: A)
B)
C)
D)

Use an integer to represent the value in the statement.

393) losing 31 cents 393) _____

- A) -31 B) 31

Answer: A

Explanation: A)
B)

Insert <, >, or = to make the statement true.

394) 3 _____ -2 394) _____

- A) > B) = C) <

Answer: A

Explanation: A)
B)
C)

Write the sentence as a mathematical statement.

395) Twenty-eight is greater than or equal to twenty-eight.

A) $28 \geq 28$

B) $28 > 28$

C) $28 = 28$

D) $28 \leq 28$

395) _____

Answer: A

Explanation: A)
B)
C)
D)

Decide whether the given number is a solution of the given equation.

396) Is -2 a solution of $5x = -10$?

A) yes

B) no

396) _____

Answer: A

Explanation: A)
B)

Evaluate.

397) 6^2

A) 64

B) 49

C) 12

D) 36

397) _____

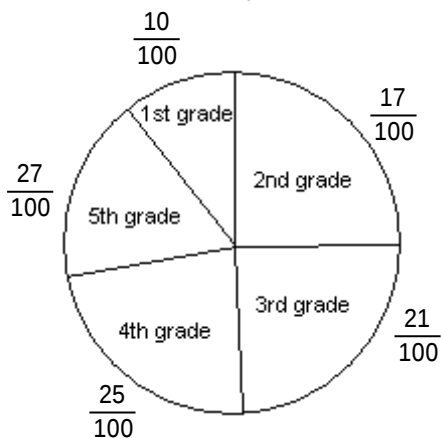
Answer: D

Explanation: A)
B)
C)
D)

Solve. Simplify the answer.

398) The circle graph shows the fraction of books read by grades one through five. What fraction of books was NOT read by the first and fourth grades?

398) _____



A) $\frac{7}{20}$

B) $\frac{9}{10}$

C) $\frac{13}{20}$

D) $\frac{3}{4}$

Answer: C

Explanation: A)
B)
C)
D)

Add or subtract as indicated. Write the answer in lowest terms.

399) $\frac{15}{88} + \frac{17}{88}$

399) _____

A) $\frac{3}{10}$

B) $\frac{3}{11}$

C) $\frac{5}{12}$

D) $\frac{4}{11}$

Answer: D

Explanation: A)
B)
C)
D)

Find the reciprocal or multiplicative inverse.

400) $-\frac{2}{5}$

400) _____

A) 5

B) $-\frac{2}{5}$

C) $-\frac{5}{2}$

D) $\frac{5}{2}$

Answer: C

Explanation: A)
B)
C)
D)

Solve. Simplify the answer.

401) Jerry caught a fish that weighed $18\frac{2}{9}$ pounds. Pat caught a fish that weighed $9\frac{7}{9}$ pounds. How much more did Jerry's fish weigh than Pat's fish? 401) _____

A) $27\frac{4}{9}$ lb

B) $8\frac{3}{9}$ lb

C) $26\frac{4}{9}$ lb

D) $8\frac{4}{9}$ lb

Answer: D

Explanation: A)

B)

C)

D)

Decide whether the given number is a solution of the given equation.

402) Is 3 a solution of $4 = 1 + x$? 402) _____

A) yes

B) no

Answer: A

Explanation: A)

B)

Multiply or divide as indicated. Write the answer in lowest terms.

403) $\frac{7}{4} \cdot \frac{5}{4}$ 403) _____

A) 28

B) $1\frac{2}{5}$

C) $2\frac{3}{16}$

D) $\frac{1}{28}$

Answer: C

Explanation: A)

B)

C)

D)

Simplify.

404) $-|7|$ 404) _____

A) $-\frac{1}{7}$

B) 0

C) -7

D) 7

Answer: C

Explanation: A)

B)

C)

D)

Translate the phrase to an expression and simplify.

405) Decrease -5 by -10.

A) 15

B) -5

C) 5

D) -15

405) _____

Answer: C

Explanation: A)
B)
C)
D)

Insert <, >, or = to make the statement true.

406) $-5 \overline{\quad} -1$

A) >

B) =

C) <

406) _____

Answer: C

Explanation: A)
B)
C)

Write the fraction as an equivalent fraction with the given denominator.

407) $\frac{2}{3}$ with a denominator of 27

A) $\frac{18}{27}$

B) $\frac{6}{27}$

C) $\frac{9}{27}$

D) $\frac{2}{27}$

407) _____

Answer: A

Explanation: A)
B)
C)
D)

Multiply.

408) $2.9(-7.48)$

A) -21.692

B) 10.38

C) 10.48

D) -4.58

408) _____

Answer: A

Explanation: A)
B)
C)
D)

Use an integer to represent the value in the statement.

409) 22-pound gain

A) -22

B) 22

409) _____

Answer: B

Explanation: A)
B)

Find the opposite (additive inverse), and the reciprocal (multiplicative inverse). Assume that the value of an expression is not 0.

410) Expression: $-6y$ Opposite: _____ Reciprocal: _____ 410) _____

A) Opposite: $-\frac{1}{6y}$

Reciprocal: $6y$

B) Opposite: $\frac{1}{6y}$

Reciprocal: $6y$

C) Opposite: $6y$

Reciprocal: $-\frac{1}{6y}$

D) Opposite: $6y$

Reciprocal: $\frac{1}{6y}$

Answer: C

Explanation: A)
B)
C)
D)

Add.

411) $\frac{3}{5} + \left(-\frac{1}{5}\right)$ 411) _____

A) $-\frac{4}{5}$

B) $-\frac{2}{5}$

C) $\frac{4}{5}$

D) $\frac{2}{5}$

Answer: D

Explanation: A)
B)
C)
D)

Write the sentence as a mathematical statement.

412) Negative twenty-six is equal to negative twenty-six. 412) _____

A) $-26 = -26$

B) $-26 \geq -26$

C) $-26 \neq -26$

D) $-26 \leq -26$

Answer: A

Explanation: A)
B)
C)
D)

Use the distributive property to write the expression without parentheses. Then simplify, if necessary.

413) $7(x + 10)$ 413) _____

A) $7x + 10$

B) $x + 70$

C) $7x + 70$

D) $7x + 17$

Answer: C

Explanation: A)
B)
C)
D)

Divide.

$$414) \frac{-24}{-3}$$

A) -8

B) 7

C) 8

D) 9

414) _____

Answer: C

Explanation: A)
B)
C)
D)

Multiply or divide as indicated. Write the answer in lowest terms.

$$415) \frac{10}{7} \cdot \frac{5}{21}$$

A) $\frac{31}{12}$

B) $\frac{15}{28}$

C) $\frac{50}{147}$

D) 6

415) _____

Answer: C

Explanation: A)
B)
C)
D)

Use the distributive property to write the expression without parentheses. Then simplify, if necessary.

$$416) -(m - 7s)$$

A) $m - 7s$

B) $-m + 7s$

C) $-m - 7s$

D) $m + 7s$

416) _____

Answer: B

Explanation: A)
B)
C)
D)

Subtract.

$$417) -2 - 6$$

A) 8

B) 4

C) -8

D) -4

417) _____

Answer: C

Explanation: A)
B)
C)
D)

Solve. Simplify the answer.

418) Daniel is $70\frac{1}{2}$ inches tall and his brother Tyler is $67\frac{5}{8}$ inches tall. How much taller is Daniel?

418) _____

A) $2\frac{2}{3}$ in.

B) $3\frac{7}{8}$ in.

C) $3\frac{1}{8}$ in.

D) $2\frac{7}{8}$ in.

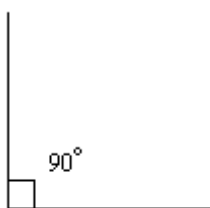
Answer: D

Explanation: A)
B)
C)
D)

Solve the problem.

419) An angle measuring 90° is shown and an angle measuring 60° is shown. Use the inequality symbol $\leq$ or $\geq$ to write a statement comparing the numbers 90 and 60.

419) _____



A) $90 \geq 60$

B) $90 \leq 60$

Answer: A

Explanation: A)
B)

Write the sentence as a mathematical statement.

420) Thirteen is less than or equal to eighteen.

420) _____

A) $13 \leq 18$

B) $13 < 18$

C) $13 \geq 18$

D) $13 \neq 18$

Answer: A

Explanation: A)
B)
C)
D)

Add.

421) $|31 + (-51)| + |-40|$

421) _____

A) 82

B) -82

C) 30

D) 60

Answer: D

Explanation: A)
B)
C)
D)

Subtract.

422) $-14 - (-11)$

A) 25

B) -25

C) -3

D) 3

422) _____

Answer: C

Explanation: A)
B)
C)
D)

Multiply or divide as indicated. Write the answer in lowest terms.

423) $1\frac{3}{4} \cdot 3\frac{3}{7}$

A) 3

B) 5

C) 6

D) 1

423) _____

Answer: C

Explanation: A)
B)
C)
D)

Use the distributive property to write the sum as a product.

424) $(7)e + (7)t$

A) $14(e + t)$

B) $7(e - t)$

C) $7(e \cdot t)$

D) $7(e + t)$

424) _____

Answer: D

Explanation: A)
B)
C)
D)

Use the distributive property to write the expression without parentheses. Then simplify, if necessary.

425) $7(2z + 6) - 3$

A) $14z + 21$

B) $14z + 39$

C) $14z + 3$

D) $9z + 10$

425) _____

Answer: B

Explanation: A)
B)
C)
D)

Perform the indicated operations.

426) $(-2)(-1)(-8) - (-1)$

A) -15

B) 15

C) 17

D) -17

426) _____

Answer: A

Explanation: A)
B)
C)
D)

Use the distributive property to write the sum as a product.

427) $13 \cdot 1 + 13 \cdot z$

A) $14(z)$

B) $(13 + 13z)$

C) $(13z)$

D) $13(1 + z)$

427) _____

Answer: D

Explanation: A)
B)
C)
D)

Simplify the expression. (Remember the order of operations.)

428) $-1 + 18 - (-3) - 19$

A) -3

B) 33

C) 39

D) 1

428) _____

Answer: D

Explanation: A)
B)
C)
D)

Use an integer to represent the value in the statement.

429) The team gave up 24 points.

A) -24

B) 24

429) _____

Answer: A

Explanation: A)
B)

Decide whether the given number is a solution of the given equation.

430) Is 9 a solution of $x - 2 = 7$?

A) yes

B) no

430) _____

Answer: A

Explanation: A)
B)

Multiply.

431) $-12(3)$

A) -36

B) -39

C) -136

D) -360

431) _____

Answer: A

Explanation: A)
B)
C)
D)

Evaluate the expression for the given replacement values.

432) $5y + \frac{55}{x}$ $x = 5, y = 7$

A) 11

B) 90

C) 46

D) 16

432) _____

Answer: C

Explanation: A)
B)
C)
D)

Add.

433) $-\frac{2}{5} + \left(-\frac{3}{5}\right)$

A) $-\frac{7}{5}$

B) $-\frac{7}{15}$

C) $\frac{1}{5}$

D) -1

433) _____

Answer: D

Explanation: A)
B)
C)
D)

Insert $<$, $>$, or $=$ to make the statement true.

434) $67 \overline{) 11} - 11$

A) $=$

B) $<$

C) $>$

434) _____

Answer: C

Explanation: A)
B)
C)

Find the additive inverse or opposite.

435) $|-25|$

A) $-\frac{1}{25}$

B) 25

C) 0

D) -25

435) _____

Answer: D

Explanation: A)
B)
C)
D)

436) $\frac{1}{4}$

A) $-\frac{1}{4}$

B) $\frac{1}{4}$

C) 4

D) -4

436) _____

Answer: A

Explanation: A)
B)
C)
D)

Translate the statement into symbols.

437) The sum of eight and ten is greater than or equal to three.

A) $8 + 10 \geq 3$

B) $8 + 8 \leq 3$

C) $8 + 10 = 3$

D) $8 + 10 > 3$

437) _____

Answer: A

Explanation: A)
B)
C)
D)

Write the sentence as an equation or inequality. Use x to represent any unknown number.

438) Twice a number is 15.

A) $x + 2 = 15$

B) $2x = 15$

C) $x = 30$

D) $\frac{1}{2}x = 15$

438) _____

Answer: B

Explanation: A)
B)
C)
D)

Identify the property illustrated by the expression.

439) $\frac{1}{4}(4) = 1$

439) _____

A) distributive property

B) associative property of multiplication

C) multiplicative inverse property

D) identity element for multiplication

Answer: C

Explanation: A)

B)

C)

D)

Add or subtract as indicated. Write the answer in lowest terms.

440) $\frac{55}{69} - \frac{39}{69}$

440) _____

A) $31\frac{2}{23}$

B) $\frac{8}{69}$

C) $1\frac{25}{69}$

D) $\frac{16}{69}$

Answer: D

Explanation: A)

B)

C)

D)

Insert <, >, or = to make the statement true.

441) -8.09 _____ -8.1

441) _____

A) <

B) >

C) =

Answer: B

Explanation: A)

B)

C)

Solve.

442) The price of a stock rose 6 points, fell 8 points, and again fell 10 points. What was the stock's total change?

442) _____

A) -24 points

B) -12 points

C) 8 points

D) 24 points

Answer: B

Explanation: A)

B)

C)

D)

Insert <, >, or = to make the statement true.

443) $-6 \underline{\hspace{1cm}} -7$

A) =

B) >

C) <

443)

Answer: B

Explanation: A)

B)

C)

Evaluate the expression for the given replacement values.

444) $x + yz$ $x = 8, y = -2, z = -8$

A) 8

B) -48

C) 24

D) -8

444)

Answer: C

Explanation: A)

B)

C)

D)

Use the distributive property to write the expression without parentheses. Then simplify, if necessary.

445) $12 + 4(5x - 2)$

A) $20x + 4$

B) $20x - 4$

C) $5x + 4$

D) $20x + 10$

445)

Answer: A

Explanation: A)

B)

C)

D)

Write the fraction in lowest terms.

446) $\frac{14}{16}$

A) $\frac{14}{16}$

B) $\frac{7}{8}$

C) $\frac{7}{2}$

D) $\frac{2}{8}$

446)

Answer: B

Explanation: A)

B)

C)

D)

Add or subtract as indicated. Write the answer in lowest terms.

447) $12\frac{1}{5} - 8\frac{4}{5}$

447) _____

A) $3\frac{2}{5}$

B) $19\frac{2}{5}$

C) $3\frac{1}{5}$

D) $20\frac{2}{5}$

Answer: A

Explanation: A)
B)
C)
D)

Use the distributive property to write the expression without parentheses. Then simplify, if necessary.

448) $\frac{1}{5}(15x - 10)$

448) _____

A) x

B) $3x - 10$

C) $3x - 2$

D) $75x - 50$

Answer: C

Explanation: A)
B)
C)
D)

Find the opposite (additive inverse), and the reciprocal (multiplicative inverse). Assume that the value of an expression is not 0.

449) Expression: -11 Opposite: _____ Reciprocal: _____

449) _____

A) Opposite: 11

B) Opposite: $\frac{1}{11}$

Reciprocal: $-\frac{1}{11}$

Reciprocal: 11

C) Opposite: $-\frac{1}{11}$

D) Opposite: 11

Reciprocal: 11

Reciprocal: $\frac{1}{11}$

Answer: A

Explanation: A)
B)
C)
D)

Subtract.

450) $-\frac{3}{4} - \left(-\frac{5}{8}\right)$
A) $\frac{1}{8}$

B) - 1

C) $-\frac{1}{4}$

D) $-\frac{1}{8}$

450) _____

Answer: D

Explanation: A)
B)
C)
D)

Evaluate the expression when $x = 5$, $y = -2$, and $t = 8$.

451) $\frac{18 - x}{y + 6}$

A) $\frac{5}{2}$

B) $\frac{13}{4}$

C) $\frac{23}{8}$

D) 0

451) _____

Answer: B

Explanation: A)
B)
C)
D)

Tell whether the statement is true or false.

452) Some real numbers are integers.

A) True

B) False

452) _____

Answer: A

Explanation: A)
B)

Evaluate.

453) 10^5

A) 50

B) 100,000

C) 9,765,625

D) 1,000,000

453) _____

Answer: B

Explanation: A)
B)
C)
D)

Write the phrase as an algebraic expression. Let x represent the unknown number.

454) Five subtracted from a number

A) $5x$

B) $5 - x$

C) $x - 5$

D) $x + 5$

454) _____

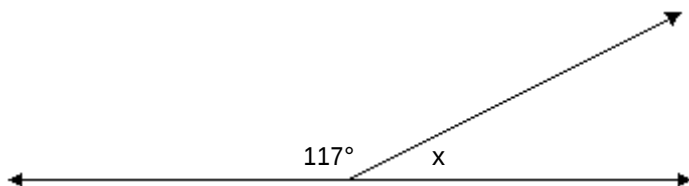
Answer: C

Explanation: A)
B)
C)
D)

Find the unknown complementary or supplementary angle.

455)

455) _____



A) 63°

B) 53°

C) 73°

D) 58°

Answer: A

Explanation: A)
B)
C)
D)

Find the reciprocal or multiplicative inverse.

456) -8

456) _____

A) 8

B) $\frac{1}{8}$

C) 0

D) $-\frac{1}{8}$

Answer: D

Explanation: A)
B)
C)
D)

Solve. Simplify the answer.

457) A painter used $6\frac{5}{6}$ gallons of paint to paint the front of a house and another $8\frac{5}{9}$ gallons to paint the back. How much paint did he use in total?

457) _____

A) $14\frac{75}{54}$ gal

B) $14\frac{35}{54}$ gal

C) $14\frac{7}{18}$ gal

D) $15\frac{7}{18}$ gal

Answer: D

Explanation: A)
B)
C)
D)

Identify the property illustrated by the expression.

458) $5 \cdot 8 = 8 \cdot 5$

- A) associative property of multiplication
C) distributive property

- B) identity element for multiplication
D) commutative property of multiplication

458) _____

Answer: D

Explanation: A)
B)
C)
D)

Use the distributive property to write the expression without parentheses. Then simplify, if necessary.

459) $4(10n + 7)$

A) $68n$

B) $40n + 28$

C) $40n + 7$

D) $14n + 11$

459) _____

Answer: B

Explanation: A)
B)
C)
D)

Use an integer to represent the value in the statement.

460) a climb of 132 feet down into a subterranean cave

A) -132

B) 132

460) _____

Answer: A

Explanation: A)
B)

Use the commutative and associative properties to simplify the expression.

461) $\frac{5}{3}(-15y)$

A) $-8y$

B) $-25y$

C) $25y$

D) $15y$

461) _____

Answer: B

Explanation: A)
B)
C)
D)

Multiply or divide as indicated. Write the answer in lowest terms.

462) $5\frac{5}{8} \cdot 2\frac{4}{7}$

462) _____

A) $1\frac{1}{14}$

B) $10\frac{5}{14}$

C) $14\frac{2}{7}$

D) $14\frac{13}{28}$

Answer: D

Explanation: A)
B)
C)
D)

Simplify.

463) $-|-11|$

463) _____

A) 0

B) $-\frac{1}{11}$

C) -11

D) 11

Answer: C

Explanation: A)
B)
C)
D)

Find the opposite (additive inverse), and the reciprocal (multiplicative inverse). Assume that the value of an expression is not 0.

464) Expression: $-a$ Opposite: _____ Reciprocal: _____

464) _____

A) Opposite: $-\frac{1}{a}$

B) Opposite: $\frac{1}{a}$

Reciprocal: a

Reciprocal: a

C) Opposite: a

D) Opposite: a

Reciprocal: $-\frac{1}{a}$

Reciprocal: $\frac{1}{a}$

Answer: C

Explanation: A)
B)
C)
D)

Write the phrase as an algebraic expression. Let x represent the unknown number.

465) Five more than a number

A) $x - 5$

B) $5x$

C) $x + 5$

D) $\frac{x}{5}$

465) _____

Answer: C

Explanation: A)
B)
C)
D)

Simplify the expression.

466) $11 \cdot 6 + 14 \cdot 4$

A) 880

B) 320

C) 682

D) 122

466) _____

Answer: D

Explanation: A)
B)
C)
D)

Add or subtract as indicated. Write the answer in lowest terms.

467) $\frac{1}{8} + \frac{5}{8}$

A) $\frac{4}{5}$

B) $\frac{2}{3}$

C) $\frac{2}{4}$

D) $\frac{3}{4}$

467) _____

Answer: D

Explanation: A)
B)
C)
D)

Write the sentence as a mathematical statement.

468) Six is greater than or equal to five.

A) $6 = 5$

B) $6 > 5$

C) $6 \geq 5$

D) $6 \leq 5$

468) _____

Answer: C

Explanation: A)
B)
C)
D)

Add or subtract as indicated. Write the answer in lowest terms.

469) $\frac{3}{10} + \frac{1}{4}$

469) _____

A) $\frac{11}{20}$

B) $\frac{1}{5}$

C) $\frac{11}{14}$

D) $\frac{7}{20}$

Answer: A

Explanation: A)
B)
C)
D)

Find the reciprocal or multiplicative inverse.

470) $\frac{4}{9}$

470) _____

A) $-\frac{9}{4}$

B) $\frac{9}{4}$

C) 9

D) $-\frac{4}{9}$

Answer: B

Explanation: A)
B)
C)
D)

Simplify.

471) $\frac{8(8) + 7}{2 - 8(3)}$

471) _____

A) $-\frac{60}{11}$

B) $\frac{71}{22}$

C) $-\frac{71}{18}$

D) $-\frac{71}{22}$

Answer: D

Explanation: A)
B)
C)
D)

Multiply or divide as indicated. Write the answer in lowest terms.

472) $4\frac{2}{7} \div 1\frac{1}{5}$

472) _____

A) $4\frac{4}{7}$

B) $3\frac{5}{7}$

C) $3\frac{4}{7}$

D) $3\frac{4}{6}$

Answer: C

Explanation: A)
B)
C)
D)

Subtract.

473) $14 - 14$

A) 0

B) 1

C) 14

D) -14

473) _____

Answer: A

Explanation: A)

B)

C)

D)

Is the following statement true or false?

474) $-16 \leq 25$

A) True

B) False

474) _____

Answer: A

Explanation: A)

B)

Solve the problem.

475) As part of a fund raiser, Maria sold 293 candy bars. Drew sold 161 candy bars. Write an inequality statement using $\leq$ or $\geq$ comparing the numbers 293 and 161.

475) _____

A) $293 \leq 161$

B) $293 \geq 161$

Answer: B

Explanation: A)

B)

Fill in the blank with one of the words or phrases listed below.

set
denominator
variable

inequality symbols
grouping symbols
equation

opposites
exponent
solution

absolute value
base

numerator
reciprocals

476) A symbol used to represent a number is called a _____.

476) _____

A) variable

B) base

C) numerator

D) denominator

Answer: A

Explanation: A)

B)

C)

D)

Decide whether the given number is a solution of the given equation.

477) Is -5 a solution to $-4 = 8 - x$?

477) _____

A) yes

B) no

Answer: B

Explanation: A)

B)

Use the distributive property to write the expression without parentheses. Then simplify, if necessary.

478) $2(5x + 4 + y)$

A) $10x + 4 + y$

B) $10x + 4 + 2y$

C) $10x + 8 + 2y$

D) $10x + 8 + y$

478) _____

Answer: C

Explanation: A)
B)
C)
D)

Simplify.

479) $\frac{4 - 3}{3 - 4}$

A) -1

B) $-\frac{4}{3}$

C) $\frac{4}{3}$

D) 1

479) _____

Answer: A

Explanation: A)
B)
C)
D)

Insert $<$, $>$, or $=$ to make the statement true.

480) $|-60|$ _____ -600

A) $<$

B) $>$

C) $=$

480) _____

Answer: B

Explanation: A)
B)
C)

Simplify the expression.

481) $6 \div 3 \cdot 2 - 5 \cdot 9$

A) -36

B) -41

C) -9

D) -44

481) _____

Answer: B

Explanation: A)
B)
C)
D)

Simplify.

482) $-\left|-\frac{3}{8}\right|$

482) _____

A) $-\frac{8}{3}$

B) 0

C) $\frac{3}{8}$

D) $-\frac{3}{8}$

Answer: D

Explanation: A)
B)
C)
D)

Write the sentence as an equation or inequality. Use x to represent any unknown number.

483) The quotient of 18 and a number is $\frac{1}{2}$.

483) _____

A) $18x = \frac{1}{2}$

B) $\frac{18}{x} = \frac{1}{2}$

C) $\frac{x}{18} = \frac{1}{2}$

D) $\frac{1}{2}x = 18$

Answer: B

Explanation: A)
B)
C)
D)

Translate the phrase to an expression and simplify.

484) Subtract 2 from -3.

484) _____

A) 5

B) 1

C) -5

D) -1

Answer: C

Explanation: A)
B)
C)
D)

Evaluate the expression when $x = 2$, $y = 1$, and $z = 4$.

485) $3z$

485) _____

A) 4

B) 3

C) 12

D) 7

Answer: C

Explanation: A)
B)
C)
D)

Evaluate the expression for the given replacement values.

486) $\frac{x^2 + z}{y^2 - 2z}$ $x = 3, y = 1, z = 10$

486) _____

A) - 1

B) $\frac{30}{7}$

C) $-\frac{19}{9}$

D) $\frac{19}{21}$

Answer: D

Explanation: A)
 B)
 C)
 D)

Tell whether the statement is true or false.

487) Some rational numbers are integers.

487) _____

A) True

B) False

Answer: A

Explanation: A)
 B)

Add.

488) $6 + (-4)$

488) _____

A) -10

B) 2

C) 10

D) -2

Answer: B

Explanation: A)
 B)
 C)
 D)

Evaluate the expression for the given replacement values.

489) $\frac{4x}{y} + y^3$ $x = 8, y = 5$

489) _____

A) $\frac{1029}{2}$

B) $\frac{47}{5}$

C) $\frac{157}{5}$

D) $\frac{657}{5}$

Answer: D

Explanation: A)
 B)
 C)
 D)

Insert <, >, or = to make the statement true.

$$490) |-6| \underline{\hspace{1cm}} |6|$$

A) =

B) <

C) >

$$490) \underline{\hspace{1cm}}$$

Answer: A

Explanation: A)
 B)
 C)

Answer Key

Testname: C1

- 1) A
- 2) B
- 3) A
- 4) D
- 5) B
- 6) A
- 7) A
- 8) A
- 9) C
- 10) B
- 11) B
- 12) D
- 13) C
- 14) B
- 15) D
- 16) A
- 17) A
- 18) C
- 19) D
- 20) C
- 21) C
- 22) D
- 23) B
- 24) D
- 25) A
- 26) C
- 27) B
- 28) B
- 29) B
- 30) A
- 31) D
- 32) D
- 33) B
- 34) A
- 35) B
- 36) C
- 37) B
- 38) D
- 39) D
- 40) B
- 41) D
- 42) C

Answer Key

Testname: C1

- 43) C
- 44) C
- 45) B
- 46) A
- 47) C
- 48) B
- 49) B
- 50) A
- 51) B
- 52) A
- 53) A
- 54) A
- 55) B
- 56) B
- 57) B
- 58) C
- 59) D
- 60) B
- 61) B
- 62) A
- 63) A
- 64) B
- 65) C
- 66) B
- 67) B
- 68) A
- 69) B
- 70) C
- 71) A
- 72) C
- 73) D
- 74) C
- 75) A
- 76) C
- 77) A
- 78) D
- 79) D
- 80) D
- 81) B
- 82) C
- 83) D
- 84) B

Answer Key

Testname: C1

- 85) B
- 86) B
- 87) D
- 88) B
- 89) A
- 90) C
- 91) B
- 92) B
- 93) A
- 94) D
- 95) C
- 96) B
- 97) A
- 98) A
- 99) B
- 100) B
- 101) B
- 102) A
- 103) D
- 104) C
- 105) B
- 106) A
- 107) C
- 108) D
- 109) A
- 110) D
- 111) A
- 112) D
- 113) B
- 114) B
- 115) A
- 116) C
- 117) B
- 118) D
- 119) C
- 120) B
- 121) D
- 122) C
- 123) C
- 124) A
- 125) C
- 126) C

Answer Key

Testname: C1

- 127) D
- 128) D
- 129) B
- 130) B
- 131) A
- 132) B
- 133) C
- 134) B
- 135) D
- 136) A
- 137) A
- 138) C
- 139) C
- 140) D
- 141) C
- 142) B
- 143) D
- 144) C
- 145) D
- 146) D
- 147) B
- 148) C
- 149) B
- 150) B
- 151) D
- 152) D
- 153) D
- 154) A
- 155) B
- 156) A
- 157) C
- 158) B
- 159) A
- 160) D
- 161) B
- 162) A
- 163) B
- 164) B
- 165) B
- 166) A
- 167) B
- 168) B

Answer Key

Testname: C1

- 169) B
- 170) C
- 171) B
- 172) C
- 173) C
- 174) A
- 175) A
- 176) B
- 177) D
- 178) D
- 179) A
- 180) B
- 181) B
- 182) D
- 183) A
- 184) A
- 185) D
- 186) D
- 187) D
- 188) C
- 189) D
- 190) D
- 191) C
- 192) B
- 193) D
- 194) A
- 195) D
- 196) B
- 197) C
- 198) A
- 199) B
- 200) C
- 201) B
- 202) B
- 203) B
- 204) C
- 205) B
- 206) C
- 207) A
- 208) B
- 209) B
- 210) B

Answer Key

Testname: C1

- 211) D
- 212) C
- 213) C
- 214) D
- 215) B
- 216) A
- 217) C
- 218) D
- 219) C
- 220) D
- 221) D
- 222) A
- 223) B
- 224) A
- 225) C
- 226) B
- 227) C
- 228) B
- 229) A
- 230) C
- 231) B
- 232) D
- 233) B
- 234) C
- 235) C
- 236) B
- 237) D
- 238) B
- 239) C
- 240) D
- 241) B
- 242) C
- 243) A
- 244) D
- 245) D
- 246) A
- 247) D
- 248) D
- 249) A
- 250) D
- 251) C
- 252) A

Answer Key

Testname: C1

- 253) B
- 254) A
- 255) C
- 256) A
- 257) C
- 258) A
- 259) B
- 260) A
- 261) A
- 262) D
- 263) D
- 264) A
- 265) D
- 266) A
- 267) B
- 268) B
- 269) D
- 270) C
- 271) A
- 272) B
- 273) B
- 274) A
- 275) C
- 276) B
- 277) B
- 278) A
- 279) B
- 280) C
- 281) A
- 282) B
- 283) C
- 284) C
- 285) B
- 286) D
- 287) A
- 288) D
- 289) D
- 290) A
- 291) A
- 292) B
- 293) A
- 294) D

Answer Key

Testname: C1

- 295) B
- 296) A
- 297) C
- 298) D
- 299) D
- 300) A
- 301) D
- 302) B
- 303) B
- 304) A
- 305) B
- 306) D
- 307) B
- 308) C
- 309) C
- 310) D
- 311) B
- 312) D
- 313) D
- 314) B
- 315) D
- 316) D
- 317) B
- 318) B
- 319) D
- 320) C
- 321) C
- 322) A
- 323) B
- 324) B
- 325) B
- 326) C
- 327) B
- 328) C
- 329) B
- 330) A
- 331) B
- 332) D
- 333) C
- 334) C
- 335) D
- 336) D

Answer Key

Testname: C1

- 337) D
- 338) B
- 339) A
- 340) A
- 341) B
- 342) A
- 343) D
- 344) A
- 345) D
- 346) A
- 347) A
- 348) C
- 349) D
- 350) B
- 351) B
- 352) B
- 353) C
- 354) D
- 355) D
- 356) C
- 357) C
- 358) A
- 359) B
- 360) B
- 361) A
- 362) A
- 363) A
- 364) C
- 365) A
- 366) A
- 367) C
- 368) C
- 369) D
- 370) A
- 371) C
- 372) A
- 373) A
- 374) C
- 375) A
- 376) B
- 377) C
- 378) A

Answer Key

Testname: C1

- 379) D
- 380) B
- 381) B
- 382) C
- 383) B
- 384) C
- 385) D
- 386) D
- 387) D
- 388) A
- 389) C
- 390) A
- 391) B
- 392) A
- 393) A
- 394) A
- 395) A
- 396) A
- 397) D
- 398) C
- 399) D
- 400) C
- 401) D
- 402) A
- 403) C
- 404) C
- 405) C
- 406) C
- 407) A
- 408) A
- 409) B
- 410) C
- 411) D
- 412) A
- 413) C
- 414) C
- 415) C
- 416) B
- 417) C
- 418) D
- 419) A
- 420) A

Answer Key

Testname: C1

- 421) D
- 422) C
- 423) C
- 424) D
- 425) B
- 426) A
- 427) D
- 428) D
- 429) A
- 430) A
- 431) A
- 432) C
- 433) D
- 434) C
- 435) D
- 436) A
- 437) A
- 438) B
- 439) C
- 440) D
- 441) B
- 442) B
- 443) B
- 444) C
- 445) A
- 446) B
- 447) A
- 448) C
- 449) A
- 450) D
- 451) B
- 452) A
- 453) B
- 454) C
- 455) A
- 456) D
- 457) D
- 458) D
- 459) B
- 460) A
- 461) B
- 462) D

Answer Key

Testname: C1

- 463) C
- 464) C
- 465) C
- 466) D
- 467) D
- 468) C
- 469) A
- 470) B
- 471) D
- 472) C
- 473) A
- 474) A
- 475) B
- 476) A
- 477) B
- 478) C
- 479) A
- 480) B
- 481) B
- 482) D
- 483) B
- 484) C
- 485) C
- 486) D
- 487) A
- 488) B
- 489) D
- 490) A