

Chapter 1—Using the Calculator

TRUE/FALSE

1. The calculator is not one of the most important tools used in food service occupations.

ANS: F

“The calculator is one of the most important tools used in food service occupations.”

PTS: 1

2. A solar mini-desktop calculator is a type of calculator.

ANS: T

“There are so many different types of calculators on the market today that it becomes a major decision when a purchase must be made. To help reach a decision, it is best to read literature on the various kinds before finalizing your choice. In this age of electronics, there are many choices: solar-powered calculators, scientific calculators, full-featured solar-powered scientific calculators, solar mini-desktop calculators, and inexpensive handheld calculators, just to name a few.”

PTS: 1

3. The first step in the use of any calculator is to make sure it is cleared.

ANS: T

“The first step in the use of any calculator is to make sure it is cleared and ready to receive calculations.”

PTS: 1

4. The constant function may be used to multiply or divide repeatedly by the same number.

ANS: T

“The constant function may be used to multiply or divide repeatedly by the same number.”

PTS: 1

5. The constant function is used to retain figures in the calculator.

ANS: F

“The memory function is used to retain figures in the calculator.”

PTS: 1

MULTIPLE CHOICE

1. The _____ is one of the most important tools in food service occupations.

- a. calculator
- b. pencil
- c. toothpick
- d. napkin

ANS: A

“The calculator is one of the most important tools used in food service occupations.”

PTS: 1

2. Which of the following is *not* a type of calculator?

- a. scientific
- b. inexpensive handheld
- c. solar-powered
- d. hand-powered

ANS: D

“There are so many different types of calculators on the market today that it becomes a major decision when a purchase must be made. To help reach a decision, it is best to read literature on the various kinds before finalizing your choice. In this age of electronics, there are many choices: solar-powered calculators, scientific calculators, full-featured solar-powered scientific calculators, solar mini-desktop calculators, and inexpensive handheld calculators, just to name a few.”

PTS: 1

3. Which of the following is a basic operation of mathematics?

- a. square root
- b. exponent
- c. percentage
- d. division

ANS: D

“The four basic methods of operation—addition, subtraction, multiplication, and division”

PTS: 1

4. Chain calculations involve:

- a. a series of numbers and a variety of math operations
- b. calculating like operations before continuing onto other operations
- c. putting a chain on the calculator to prevent theft
- d. testing the calculator

ANS: A

“Chain calculations involve a series of numbers and a variety of math operations.”

PTS: 1

5. The _____ key is used to convert a positive number to a negative number, and vice versa.

- a. square root
- b. exponent

- c. change sign
- d. percentage

ANS: C

“This change sign key is used to convert a positive number to a negative number, and vice versa.”

PTS: 1

6. The executive chef has to figure out how many 9-ounce steaks are left after Saturday night. She has to take into account how many she cut and how many the restaurant sold from Thursday through Saturday. On Thursday, the sous chef cut 125 steaks. The restaurant sold 76 steaks. Friday, 20 more steaks were cut, and the restaurant sold 42 steaks. Saturday, she cut 25 more steaks, and the restaurant sold 35 steaks. How many steaks are left for Sunday?
- a. 81 steaks
 - b. 79 steaks
 - c. 17 steaks
 - d. 35 steaks

ANS: C

$$125 - 76 + 20 - 42 + 25 - 35 = 17$$

PTS: 1

7. At a banquet, a chef has to prepare three entrees: one for 87 prime ribs, one for 55 salmon fillets, and the other for 105 chicken breasts. How many clean plates must the cook have to serve the meals?
- a. 37 plates
 - b. 247 plates
 - c. 137 plates
 - d. 105 plates

ANS: B

$$87 + 55 + 105 = 247$$

PTS: 1

8. Mrs. Davis has booked an awards banquet for 200 guests. Because of the addition of a famous guest speaker being booked after the original booking, she calls and states that she anticipates an increase of guests by 50 percent. How many meals will now have to be prepared for Mrs. Davis's banquet?
- a. 300 meals
 - b. 200 meals
 - c. 100 meals
 - d. 400 meals

ANS: A

$$200 \times 0.5 = 100$$

$$200 + 100 = 300$$

PTS: 1

9. The purchasing agent at the Henderson Bar and Grill purchased seven food items at \$13.25 each and three food items at \$2.50 each. If the sales tax on the total purchase was 7.5%, what was the total cost of the purchase?
- a. \$107.77
 - b. \$100.25
 - c. \$99.71
 - d. \$16.93

ANS: A

$$7 \times \$13.25 = \$92.75$$

$$3 \times \$2.50 = \$7.50$$

$$\$92.75 + \$7.50 = \$100.25$$

$$\$100.25 \times 0.075 = \$7.52$$

$$\$100.25 + \$7.52 = \$107.77$$

PTS: 1

10. Julie's Restaurant purchased some new equipment for \$5,750. It was given a special discount of 5% plus a sales tax of 6%. What was the total cost?
- a. \$5,462.50
 - b. \$327.75
 - c. \$5,790.25
 - d. \$287.50

ANS: C

$$\$5,750 \times 0.05 = \$287.50$$

$$\$5,750 - \$287.50 = \$5,462.50$$

$$\$5,462.50 \times 0.06 = \$327.75$$

$$\$5,462.50 + \$327.75 = \$5,790.25$$

PTS: 1

NUMERIC RESPONSE

1. $94 + 339 + 8 =$ _____

ANS: 441

PTS: 1

2. $153 + 0.6 + 14.4 + 16 =$ _____

ANS: 184

PTS: 1

3. $454 + 3 + 87.5 + 0.08 =$ _____

ANS: 544.58

PTS: 1

4. $1,323 - 571 =$ _____

ANS: 752

PTS: 1

5. $459 - 320.1 =$ _____

ANS: 138.9

PTS: 1

6. $700.003 - 326.4 =$ _____

ANS: 373.603

PTS: 1

7. $748 \times 0.4 =$ _____

ANS: 299.2

PTS: 1

8. $30 \times 11.5 \times 0.8 =$ _____

ANS: 276

PTS: 1

9. $384.5 \times 0.05 \times 4.5 \times 16 =$ _____

ANS: 1,384.2

PTS: 1

10. $1694.5 \div 25.5 =$ _____
(Round your answer to four decimal places.)

ANS: 66.4510

PTS: 1

11. $6,660 \div 20 =$ _____
(Round your answer to three decimal places.)

ANS: 333.000

PTS: 1

12. $7 \div 20 =$ _____
(Round your answer to three decimal places.)

ANS: 0.350

PTS: 1

13. $993 - 325.03 + 0.04 - 212 + 75.98 =$ _____

ANS: 531.99

PTS: 1

14. $58.62 + 7,708.30 - 311.01 - 51.58 =$ _____

ANS: 7,404.33

PTS: 1

15. $44.444 + 444.44 - 4.4 =$ _____

ANS: 484.484

PTS: 1

What is the amount of sales tax on the following amounts, if a 7.5% sales tax rate is used as the constant? Round answers to the nearest cent.

16. \$331.41

ANS: \$24.86

PTS: 1

17. \$5,275.12

ANS: \$395.63

PTS: 1

18. \$777.76

ANS: \$58.33

PTS: 1

Using 30% as the desired food cost percentage, find the menu price based upon the raw food cost of the following questions. Round answers to the nearest cent.

19. \$5.00

ANS: \$16.67

PTS: 1

20. \$0.82

ANS: \$2.73

PTS: 1

21. \$4.50

ANS: \$15

PTS: 1

Round answers to the nearest cent.

22. Three printers were purchased for \$1,720.00. A 5% discount was given because the machines were purchased in quantity. A sales tax of 4% was added to the bill. What was the total bill?

ANS: \$1,699.36

PTS: 1

23. The Great Falls Restaurant purchased a beverage machine for \$3,375. Because the machine was slightly damaged, they were given a 5% discount. A sales tax of 5% was added to the purchase price. What was the total cost?

ANS: \$3,366.56

PTS: 1

24. A party of 12 people was served. The bill was \$277.00. A discount of 6% was given because it was a church group. A sales tax of 4.5% was added to the bill. What was the total bill?

ANS: \$272.10

PTS: 1

25. Michael Parcell purchased bathroom fixtures costing \$469.95, \$320.00, \$129.50, and \$980.75. If the sales tax was 8.75%, what was the total cost?

ANS: \$2,066.47

PTS: 1

26. Kathy Roozee made purchases of \$4.97, \$20.75, \$43.00, and \$19.65. If the sales tax was 5.25% of the total amount, what was the total cost?

ANS: \$93.01

PTS: 1

27. John Blackburn purchased eight items at \$5.75 each. Sales tax was 5%. What was the total cost?

ANS: \$48.30

PTS: 1

28. \$17,585 – 32% discount

ANS: \$11,957.80

PTS: 1

29. \$3,193.00 – 19.4% discount

ANS: \$2,573.56

PTS: 1

30. \$349.95 × 7%

ANS: \$24.50

PTS: 1

31. \$4,757.30 × 19.2%

ANS: \$913.40

PTS: 1

32. \$17.00 × 3.5%

ANS: \$0.60

PTS: 1

33. $\$98.83 + 28\%$ gratuity

ANS: \$126.50

PTS: 1

34. $\$979.00 + 5.76\%$ tax

ANS: \$1,035.39

PTS: 1

35. $\$8.00 \div 32.7\%$

ANS: \$24.46

PTS: 1

36. $\$147.82 \div 29.2\%$

ANS: \$506.23

PTS: 1

37. $\$356.00 \div 4.6\%$

ANS: \$7,739.13

PTS: 1

38. Mr. Miller purchased three items costing \$4.47 each and seven items costing \$6.61 each. If the sales tax is 6%. What was the total cost?

ANS: \$63.26

PTS: 1

39. A party was given for Mia at which 38 people were served. The bill was \$608. A discount of 3% was given. A sales tax of 3.75% was added to the bill. What was the total bill?

ANS: \$611.88

PTS: 1

40. Round to the nearest cent.
\$0.049

ANS: \$0.05

PTS: 1

41. Round to the nearest cent.
\$0.271

ANS: \$0.27

PTS: 1

42. Round to the nearest cent.
\$244.941

ANS: \$244.94

PTS: 1

43. Round to the nearest cent.
\$44.129

ANS: \$44.13

PTS: 1

44. Round to the nearest tenth of a percent.
6.55%

ANS: 6.6%

PTS: 1

45. Round to the nearest tenth of a percent.
53.93%

ANS: 53.9%

PTS: 1

46. Round to the nearest tenth of a percent.
87.239%

ANS: 87.2%

PTS: 1

47. Round to the nearest tenth of a percent.
70.423%

ANS: 70.4%

PTS: 1

48. Round to the nearest tenth of a percent.
10.45%

ANS: 10.5%

PTS: 1

COMPLETION

1. The _____ may be used to multiply or divide repeatedly by the same number.

ANS: constant function

PTS: 1

2. The _____ is used to retain figures in the calculator.

ANS: memory function

PTS: 1

3. _____ involve a series of numbers and a variety of math operations.

ANS: Chain calculations

PTS: 1

MATCHING

Match these calculator keys/abbreviations with their definition.

- | | |
|-------|--------|
| a. C | e. CM |
| b. CE | f. MRC |
| c. AC | g. +/- |
| d. M+ | h. RM |

1. Clears the calculator of all functions except the memory function
2. Adds display number to the memory
3. Press to clear an incorrect keyboard entry that has not been entered into memory
4. Recalls the memory and also clears the memory
5. Used to convert a positive number to a negative number, and vice versa.
6. Displays memory figures and clears the memory
7. Displays content in memory; does not clear memory
8. Clears the calculator of all functions, including the memory function

- | | |
|-----------|--------|
| 1. ANS: A | PTS: 1 |
| 2. ANS: D | PTS: 1 |
| 3. ANS: B | PTS: 1 |
| 4. ANS: F | PTS: 1 |
| 5. ANS: G | PTS: 1 |
| 6. ANS: E | PTS: 1 |
| 7. ANS: H | PTS: 1 |
| 8. ANS: C | PTS: 1 |