

CHAPTER 1 FORM A

TECHNICAL MATH

NAME: _____

SECTION: _____

Perform the indicated operation

1. $(-4) + 12$ 1. _____

2. $-3 - 3 + 7$ 2. _____

3. $5^2 - 3(13 - 7)$ 3. _____

4. $8 - 3(6 + (-2))$ 4. _____

5. $\frac{4(-2)(3)}{(2)(-1)}$ 5. _____

6. $-4^2 + 16$ 6. _____

7. $\left(\frac{3}{4}\right)^2$ 7. _____

8. $-\left(-\frac{2}{5}\right)^2$ 8. _____

9. $|2(4 - 2)^2 - 10|$ 9. _____

10. $\frac{3.25^2 + \sqrt{12}}{2(3.1)^2}$ Round to the nearest thousandth . 10. _____

11. $\sqrt{2.25 + 4.1^2}$ Round to the nearest hundredth. 11. _____

12. Express 17,400,000,000 using scientific notation. 12. _____

13. Express 0.00000043 using scientific notation. 13. _____

14. Express 2.17×10^7 as an ordinary number. 14. _____

2 TECHNICAL MATHEMATICS, Signed Numbers

15. Add: $(7.34 \times 10^5) + (2.2 \times 10^4)$ 15. _____

16. Subtract: (5.67×10^{-4}) from (9.9×10^{-3}) 16. _____

17. Multiply: $(3.6 \times 10^5)(2.4 \times 10^3)$ 17. _____

18. Divide: $\frac{(1.2 \times 10^{-4})}{(4.8 \times 10^2)}$ 18. _____

19. On a recent math test a student missed 4 True/False questions worth 2 points a piece and 3 word problems worth 2.5 points each. If the total number of points possible was 100, what was the student's score?

19. _____

20. An engineer needs to find the time it will take for his new computer to do 50 billion calculations. If it takes his new computer 2.6×10^{-13} seconds to do one calculation, how long will it take to do the 50 billion calculations? Leave your answer in scientific notation.

20. _____

NAME: _____

SECTION: _____

Perform the indicated operation

1. $(-5) + 11$

1. _____

2. $-4 - 4 + 9$

2. _____

3. $4^2 - 3(13 - 10)$

3. _____

4. $7 - 3(5 + (-3))$

4. _____

5. $\frac{5(-2)(3)}{(3)(-1)}$

5. _____

6. $-5^2 + 25$

6. _____

7. $\left(\frac{2}{5}\right)^2$

7. _____

8. $-\left(-\frac{3}{4}\right)^2$

8. _____

9. $|3(4 - 6)^2 - 10|$

9. _____

10. $\frac{2.75^2 + \sqrt{20}}{3(2.1)^2}$ Round to the nearest thousandth .

10. _____

11. $\sqrt{3.5 + 4.3^2}$ Round to the nearest hundredth.

11. _____

12. Express 14,700,000,000 using scientific notation.

12. _____

13. Express 0.0000034 using scientific notation.

13. _____

4 TECHNICAL MATHEMATICS, Signed Numbers

14. Express 7.12×10^5 as an ordinary number. 14. _____

15. Add: $(3.74 \times 10^5) + (3.2 \times 10^4)$ 15. _____

16. Subtract: (6.57×10^{-4}) from (9.9×10^{-3}) 16. _____

17. Multiply: $(4.3 \times 10^5)(5.2 \times 10^3)$ 17. _____

18. Divide: $\frac{(1.2 \times 10^{-5})}{(4.8 \times 10^{-2})}$ 18. _____

19. On a recent math test a student missed 5 True/False questions worth 3 points a piece and 2 word problems worth 3.5 points each. If the total number of points possible was 100, what was the student's score?

19. _____

20. An engineer needs to find the time it will take for his new computer to do 75 billion calculations. If it takes his new computer 2.7×10^{-13} seconds to do one calculation, how long will it take to do the 75 billion calculations? Leave your answer in scientific notation.

20. _____