Chapter 2 – Order of Operations

Solve.

1. $4 \times (-2) + 25 \times (4 + -2)$

2. $-12 - 2(3 + 1)^2 - 10 \div (-2)$

3. $\dfrac{(-5 + 5)^2 - 27}{(2 - 1) - -2}$

4. $3(-10) \div (-2) \times 3 \div 9 \times 2$

5. $\dfrac{-8}{3} \times \dfrac{-7}{2} \times \dfrac{12}{-49}$

6. $-9 - 4 + -3 - -2$

7. $-13 + [4 + (-4 - 2)]$

8. $\dfrac{12 \times (-5) \times 6 \times (-20)}{-12 \times 2 \times (-4) \times (-3)}$

9. $\dfrac{10 + 2[4 + (3 - (+2)]}{4^2 - -4}$

Chapter 3 – Properties

Solve the following by using properties. Name the properties you use.

1. $\frac{23}{0} =$	10. $(31 \times 5) \times 2 =$
2. $-63 \times 1 =$	11. $20 \times 7 \times 5 =$
	12. $15 + 8 + 5 =$
3. $\frac{0}{39} =$	13. $\frac{62}{0} =$
4. $(19 + 8) + 2 =$	14. $\frac{-48}{0} =$
	15. $-5(3 - 2) =$
5. $5 \times \frac{1}{5} =$	
6. $-802 + 802 =$	16. $\frac{0}{-567} =$
	17. $8 \times \frac{1}{8} =$
7. $-12 + 0 =$	
	18. $(-4)(0) =$
8. $10(4 + 3) =$	
	19. $-2(7 + 3) =$
9. $29 \times 1 =$	

Chapter 4 – Evaluating Expressions

Evaluate the expressions.

1. $14 - y$, when $y = 9$

2. $p - 7$, when $p = 13$

3. $4c$, when $c = 3$

4. $-6g$, when $g = -1$

5. $-16 \div t$, when $t = 4$

6. $\frac{14}{x}$, when $x = 7$

7. $-8 - w$, when $w = -5$

8. $a \div (-2)$, when $a = -22$

9. n^3 , when $n = 3$

10. k^4 , when $k = -2$

11. $-y^2$, when $y = -2$

12. $-c^3$, when $c = -1$

13. $4g^2 - 2$, when $g = 4$

14. $3d^2 - d + 6$, when $d = -2$

15. $\dfrac{-4x^3}{5x + 2}$, when $x = -2$

16. $10 + 5x + x^2$, when $x = 4$

17. $\dfrac{-3x + 18}{x^2}$, when $x = 3$

18. $24 - x^3$, when $x = -2$

Chapter 4 – Formulas

1. $A = \frac{a \times p}{2}$, where a = 4 and p = 20

2. $A = \frac{h(b + c)}{2}$, where h = 4 , b = 8 and c = 6

3. $V = \frac{B \times h}{3}$, where B = 15 and h = 2

4. $P = 2l + 2w$, where $l = 5$ and w = 6

5. $A = s^2$, where s = 10

Chapter 4 – Properties of Equality

6. 20 = 20 divide both sides by 5 using a fraction symbol

7. -7 = -7 add three to both sides

8. -2 = -2 subtract 8 from both sides

9. (-8) = (-8) multiply both sides by (-4) using parentheses

10. -27 = -27 divide both sides by 3 using the ÷ symbol

Chapter 4 – Equations

Solve the equations by guessing and checking.

1. $x + 4 = 13$

2. $b - 4 = 8$

3. $4k = 24$

4. $j \div 2 = 4$

5. $\frac{w}{3} = 5$

6. $r + 2 = 9$

7. $w - 4 = 16$

8. $4y = 36$

9. $x \div 8 = 2$

10. $\frac{f}{6} = 6$