

Name: _____ Date: _____

1. Simplify:

$$5 - 24[p - 2y] - 4[5p - 2y]$$

2. Simplify:

$$2p + 12[p - 4y] - 3[2p - 4y]$$

3. Simplify:

$$3 - 15[a - 2y] - 4[3a - 2y]$$

4. Simplify:

$$4z + 23[z - 2y] - 5[4z - 2y]$$

5. Simplify:

$$4 - 19[z - 3y] - 4[4z - 3y]$$

6. Simplify:

$$5k + 22[k - 5y] - 4[5k - 5y]$$

7. Evaluate the variable expression when $a = 9$, $b = 8$, and $c = -3$.

$$-3a + 4c$$

8. Evaluate the variable expression when $a = 9$, $b = 3$, and $c = -6$.

$$c^2 - 4ac$$

9. Evaluate the variable expression when $a = 6$, $b = 10$, and $c = -5$.

$$b^2 - c^2$$

10. Evaluate the variable expression when $a = 4$, $b = 3$, and $c = -4$.

$$a - (a + b)^2$$

11. Evaluate the variable expression when $a = 12$, $b = 5$, and $c = -8$.

$$a^2 - \frac{ac}{8}$$

12. Evaluate the variable expression when $a = -12$, $b = 7$, $c = -7$, and $d = 8$.

$$\frac{b+8d}{b}$$

13. Evaluate the variable expression when $a = -2$, $b = 5$, $c = -4$, and $d = 4$.

$$(b+c)^2 - 4a$$

14. Evaluate the variable expression when $a = -6$, $b = 3$, $c = -4$, and $d = 10$.

$$\frac{b^2 - c}{ad + 3c}$$

15. Evaluate the variable expression when $a = 10$, $b = 8$, and $c = -6$.

$$-3a + 4c$$

16. Evaluate the variable expression when $a = 6$, $b = 3$, and $c = -4$.

$$c^2 - 4ac$$

17. Evaluate the variable expression when $a = 9$, $b = 7$, and $c = -4$.

$$c^2 - a^2$$

18. Evaluate the variable expression when $a = 2$, $b = 4$, and $c = -5$.

$$c - (c+a)^2$$

19. Evaluate the variable expression when $a = 8$, $b = 5$, and $c = -4$.

$$c^2 - \frac{ac}{8}$$

20. Evaluate the variable expression when $a = -5$, $b = 9$, $c = -9$, and $d = 4$.

$$\frac{b+8d}{b}$$

21. Evaluate the variable expression when $a = -4$, $b = 2$, $c = -12$, and $d = 3$.

$$(b + c)^2 - 3a$$

22. Evaluate the variable expression when $a = -2$, $b = 3$, $c = -10$, and $d = 10$.

$$\frac{b^2 - b}{ad + 3c}$$

Answer Key

1. $5 - 44p + 56y$
2. $8p - 36y$
3. $3 - 27a + 38y$
4. $7z - 36y$
5. $4 - 35z + 69y$
6. $7k - 90y$
7. -39
8. 252
9. 75
10. -45
11. 156
12. $\frac{71}{7}$
13. 9
14. $-\frac{13}{72}$
15. -54
16. 112
17. -65
18. -14
19. 20
20. $\frac{41}{9}$
21. 112
22. $-\frac{3}{25}$