

Algebra 1

Practice Quiz 7.5-7.8

NAME KEY

Find the sum or difference. (2 Points)

1. $(4x + 6y) + (7x + 9y)$ DO NOT FOIL

$11x + 15y$

2. $(5x + 8y) - (2x + 6y)$

$3x + 2y$

3. $(3x - 4y) + (9x - 7y)$

$12x - 11y$

4. $(6x - 2y) - (-3x - y)$

$9x - y$

5. $(x + 4y - 6z) + (x - 5y + 6z)$

$2x - y$

6. $3(x - 4y + 2z) - (-3x - 4y + 7z)$

$(3x - 12y + 6z)$

$6x - 8y - z$

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

Solve each equation. (3 Points)

7. $2(4x - 2) - x = x + 8$

$8x - 4 - x = x + 8$

$7x - 4 = x + 8$

$6x - 4 = 8$

$6x = 12$

$x = 2$

8. $5(y + 1) - 7 = 2(y + 2)$

$5y + 5 - 7 = 2y + 4$

$5y - 2 = 2y + 4$

$3y = 6$

$y = 2$

9. $3(2x + 6) + 4 = 3(x - 1) + 2x$

$6x + 18 + 4 = 3x - 3 + 2x$

$6x + 22 = 5x - 3$

$x + 22 = -3$

$x = -25$

10. $2(4y - 3) = 3(2y - 3) - 7$

$8y - 6 = 6y - 9 - 7$

$8y - 6 = 6y - 16$

$2y = -10$

$y = -5$

Find each product. (2 Points)

11. $4(3x - 5)$

$12x - 20$

12. $2x(6x + 9)$

$12x^2 + 18x$

Points (28) _____

Find each product. (2 Points)

13. $3x(2x^2 - 7x + 8)$

$$6x^3 - 21x^2 + 24x$$

14. $5x(3x^3 + 4x^2 + 2x)$

$$15x^4 + 20x^3 + 10x^2$$

15. $(x + 2)(x + 6)$

FOIL

$$\begin{aligned} &x^2 + 6x + 2x + 12 \\ &x^2 + 8x + 12 \end{aligned}$$

16. $(x - 3)(x - 5)$

$$\begin{aligned} &x^2 - 5x - 3x + 15 \\ &x^2 - 8x + 15 \end{aligned}$$

17. $(x + 5)(x - 6)$

$$\begin{aligned} &x^2 - 6x + 5x - 30 \\ &x^2 - x - 30 \end{aligned}$$

18. $(2x - 4)(x + 3)$

$$\begin{aligned} &2x^2 + 6x - 4x - 12 \\ &2x^2 + 2x - 12 \end{aligned}$$

19. $(x + 5)(x - 5)$ FL ONLY!!

$$x^2 - 25$$

20. $(3x + 2)(2x - 3)$

$$\begin{aligned} &6x^2 - 9x + 4x - 6 \\ &6x^2 - 5x - 6 \end{aligned}$$

21. $(3x - 1)(3x + 4)$

$$\begin{aligned} &9x^2 + 12x - 3x - 4 \\ &9x^2 + 9x - 4 \end{aligned}$$

22. $(x + 4)^2$ FOIL

$$\begin{aligned} &(x+4)(x+4) \\ &x^2 + 4x + 4x + 16 \\ &x^2 + 8x + 16 \end{aligned}$$

23. $(5x + 3)(5x - 3)$ FL

$$25x^2 - 9$$

24. $(3x - 2)^2$

$$\begin{aligned} &(3x-2)(3x-2) \\ &9x^2 - 6x - 6x + 4 \\ &9x^2 - 12x + 4 \end{aligned}$$

25. $(4x + 1)(3x - 2)$

$$\begin{aligned} &12x^2 - 8x + 3x - 2 \\ &12x^2 - 5x - 2 \end{aligned}$$

26. $(2x + 5y)(3x - 6y)$

$$\begin{aligned} &6x^2 - 12xy + 15xy - 30y^2 \\ &6x^2 + 3xy - 30y^2 \end{aligned}$$

13. _____

14. _____

15. _____

16. _____

17. _____

18. _____

19. _____

20. _____

21. _____

22. _____

23. _____

24. _____

25. _____

26. _____

Points (28) _____