

Worksheet 9

1. Square. $(a - 4b)$
 - A. $a^2 - 8ab + 16b^2$
 - B. $a^2 - 4ab + 16b^2$
 - C. $a^2 - 4ab + 8b^2$
 - D. $a^2 + 16b^2$
2. Square. $(4a - 5b)$
 - A. $16a^2 - 40ab + 25b^2$
 - B. $16a^2 - 20ab + 25b^2$
 - C. $16a^2 - 20ab + 10b^2$
 - D. $16a^2 + 25b^2$
3. Square. $(3x + 7)$
 - A. $9x^2 - 49$
 - B. $9x^2 - 42x + 49$
 - C. $9x^2 + 49$
 - D. $9x^2 + 42x + 49$
4. Simplify. $(3x - 7w)(3x - 7w)$
 - A. $9x^2 + 49w^2$
 - B. $9x^2 - 49w^2$
 - C. $9x^2 + 21xw + 49w^2$
 - D. $9x^2 - 42xw + 49w^2$
5. Square. $(9x - 5y)$
 - A. $81x^2 + 25y^2$
 - B. $16x^2 - 10y^2$
 - C. $81x^2 - 45xy + 25y^2$
 - D. $81x^2 - 90xy + 25y^2$
6. Determine the quotient.
 $(x^2 - 4x - 4) \div (x + 1) =$
 - A. $x - 5 + \frac{1}{x + 1}$
 - B. $x - 5 - \frac{1}{x + 1}$
 - C. $x - 3 + \frac{13}{x + 1}$
 - D. $x + 5 + \frac{9}{x + 1}$
7. Determine the quotient.
 $(6x^2 + 5x - 1) \div (3x + 4) =$
 - A. $2x - 1 + \frac{1}{x + 4}$
 - B. $2x - 1 + \frac{3}{3x + 4}$
 - C. $2x + 3$
 - D. $2x + 4 + \frac{15}{3x + 4}$

8. Determine the quotient.

$$(6a^2 - 4a + 12) \div (-2a^2) =$$

- A. $-3 + \frac{2}{a} - \frac{6}{a^2}$
- B. $-4a + 9$
- C. $-3 - 2a - 6a^2$
- D. $-3 + 4a - 12a^2$

9. Determine the quotient.

$$(x^3 + 8) \div (x + 2) =$$

- A. $x^2 - 2x + 4$
- B. $x^2 - 2x - 4$
- C. $x^2 + 4$
- D. $x^2 + 2x + 4$

10. Determine the quotient.

$$(24t^2 + 47t - 21) \div (8t - 3) =$$

- A. $3t + 7$
- B. $3t + 7 + \frac{-42}{8t - 3}$
- C. $3t - 7$
- D. $3t + 7 + \frac{-9}{8t - 3}$

11. Determine the quotient.

$$(3b^3 + 6b^2 - 3b - 4) \div (b + 2)$$

- A. $3b^2 + 3 + \frac{2}{b + 2}$
- B. $3b^2 - 3 + \frac{-2}{b + 2}$
- C. $3b^2 + 3 + \frac{-10}{b + 2}$
- D. $3b^2 - 3 + \frac{2}{b + 2}$

12. What is the *y-intercept* of the line whose equation is $3x + 5y = -15$?

- A. $(-5, 0)$
- B. $(0, -3)$
- C. $(-3, 0)$
- D. $(0, 3)$