

Name:

1.1 Combing Like Terms Practice

Period:

1. Which of the following expressions is equivalent to

$$(5x - 3y + 2) + (2x + y - 4)$$

?

A. $7x - 2y + 6$

B. $7x - 2y - 2$

C. $3x - 4y - 2$

D. $7x - 4y - 2$

2. Simplify the expression:

$$(10a + 6b) - (4a - 2b)$$

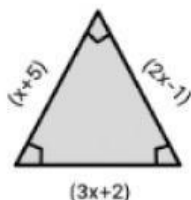
A. $6a + 8b$

B. $6a + 4b$

C. $14a + 4b$

D. $14a + 8b$

3. A triangle has sides with lengths represented by the expressions shown in the figure below. Find the perimeter of the triangle by combining the like terms.



4. Simplify the following expression:

$$(7m + 4n) - (m - 3n)$$

A. $6m + 7n$

B. $6m + n$

C. $8m + n$

D. $8m + 7n$

5. The perimeter of a triangle is given by the expression

$$(x + 5) + (2x - 3) + (3x + 1)$$

. Which of the following expressions is equivalent to the perimeter?

A. $6x - 1$

B. $5x + 3$

C. $6x - 3$

D. $6x + 3$

6. Which of the following expressions is equivalent to

$$(3p - 7q + 2r) - (p + 4q - 5r)$$

?

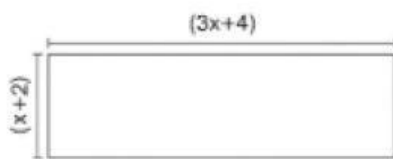
A. $2p - 11q - 3r$

B. $2p - 11q + 7r$

C. $2p - 3q + 7r$

D. $4p - 3q - 3r$

7. A rectangle has a length and width as shown in the diagram. What is the perimeter of the rectangle, in terms of x ?



8. A student simplified the expression $(6x^2 + 5x - 2) + (x^2 - 8x + 4)$ to get $7x^2 - 3x + 2$. Was the student's work correct?

- A. No, because the student incorrectly combined the x^2 terms, $6x^2$ and x^2 .
- B. No, because the student incorrectly added the constant terms, -2 and 4 .
- C. Yes, the student correctly combined all the like terms.
- D. No, because the student incorrectly combined the 'x' terms, $5x$ and $-8x$.

9. Which expression is equivalent to

$$(-5a + 6b) - (-2a - b)$$

?

A. $-7a + 5b$

B. $-3a + 7b$

C. $-7a + 7b$

D. $-3a + 5b$

10. Find the perimeter of the trapezoid shown below. What is the simplified expression for the perimeter?

