

0.5 - Combining Like Terms

Name: _____

1. A triangle has side lengths of $(7s + 4t)$ centimeters, $(9s - 7u)$ centimeters, and $(10u - 9t)$ centimeters. Which expression represents the perimeter, in centimeters, of the triangle?

A. $16s - 5t + 3u$ B. $14t + 16s - 16u$
C. $26su - 12tu$ D. $11st + 2su + tu$

2. A triangle has side lengths of $(2s + 3)$ centimeters, $(10s + 4)$ centimeters, and $(10t - 5)$ centimeters. Which expression represents the perimeter, in centimeters, of the triangle?

A. $5t + 5s + 14$ B. $2 + 10t + 12s$
C. $7 + 12s + 5t$ D. $5t + 19s$

3. Which expression is equivalent to $2m + m - 3$?

A. $2m - 2$ B. $-2m$
C. $3m - 3$ D. $0m$

4. The width of a rectangle measures $(7u + 3)$ centimeters, and its length measures $(9u + 6)$ centimeters. Which expression represents the perimeter, in centimeters, of the rectangle?

A. $9 + 16u$ B. $20u + 30$
C. $10u + 15$ D. $32u + 18$

5. Which expression is equivalent to $n - 3n + 6n$?

A. $4n$ B. $1 + 3n$ C. $-2n$ D. $n + 3$

6. Combine like terms.

$$x - 3y^3 + 3x^3 - 5x - x^3 - x - 2x^3$$

$$-5x - 3y^3$$

7. Combine like terms.

$$2 - 4y^3 + 5y^3 + y^3 + 2 + 5x^3 + 2$$

$$\boxed{6 + 2y^3 + 5x^3}$$

8. Combine like terms.

$$6 + 2 + 2x + 6y + 2y + 1 + 2x$$

$$\boxed{9 + 4x + 8y}$$

9. Combine like terms.

$$3 - 5x^2 - 6y^3 + 2x^2 - 6 + 2 + 3y^3$$

$$\boxed{-1 - 3x^2 - 3y^3}$$

10. Combine like terms.

$$5 - 3x^2 - 2x^2 - 2x^3 - x^3 - 3 + 3x^2$$

$$\boxed{2 - 2x^2 - 3x^3}$$