

Day 3 – Simplifying Algebraic Expressions: Combining Like Terms Practice

1. Simplify each expression.

a. $5f + 8 - 13f$

$$-8f + 8$$

b. $2x - 5x^2 + 3 + 4x$

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

c. $3x^2 + 6x - 2y + 4x^2 + 3y - x$

$$7x^2 + 5x + y$$

d. $\frac{4x+9-x}{3}$

$$\frac{3x+9}{3}$$

$$\frac{3x}{3} + \frac{9}{3}$$

$$\boxed{x+3}$$

e. $\frac{8x-20+2x}{5} - 7x + 2$

$$\frac{10x-20}{5} - 7x + 2$$

$$\frac{10x}{5} - \frac{20}{5} - 7x + 2$$

$$2x - 4 - 7x + 2$$

$$\boxed{-5x - 2}$$

f. $\frac{6-5x-x+10}{2}$

$$\frac{16-6x}{2}$$

$$\frac{16}{2} - \frac{6x}{2}$$

$$\boxed{8-3x}$$

2. Give an example of two like terms and two unlike terms. Explain why they would or would not be classified as like terms. *Answers will vary*

Like

$$4x \text{ \& } 7x$$

$$3y^2 \text{ \& } -5y^2$$

Unlike

$$4x \text{ and } 5y : \text{ not the same variable}$$

$$2x^2 \text{ and } 4x : \text{ exponents do not match}$$

$$5y \text{ and } 2 : 2 \text{ does not have a variable}$$