

Lesson Extra Practice:
Algebraic Expressions

Identify the terms and like terms in the expression

1. $-3c + 6 + 5c - 2$

$$1. \underline{-3c} + \underline{6} + \underline{5c} - \underline{2}$$

$$(-3c + 5c) + (+6 - 2)$$

$$2c + 4$$

$$2c + 4$$

/c

$$2. 4n^2 - 2.3n + 2n^2 - 5.6$$

$$2. \quad \underline{4n^2} - \underline{2.3n} + \underline{2n^2} - \underline{5.6}$$

$$(\underline{4n^2} + \underline{2n^2}) + |(-2.3n) + |(-5.6)$$

$$6n^2 - 2.3n - 5.6$$

$$3. \frac{1}{5}x^3 - x^3 + 2x$$

$$3. \frac{1}{5}x^3 - x^3 + 2x$$

$$\left(\frac{1}{5}x^3 - 1x^3\right) + 2x$$

$$\left(\frac{1}{5}x^3 - \frac{5}{5}x^3\right) + 2x$$

$$\frac{4}{5}x^3 + 2x$$



$$\frac{1}{5}x^3 - 2x^3$$

$$\frac{1}{5}x^3 - \frac{10}{5}x^3$$

4. $-2.5 + s + 6.4s - 4s^2$

$$4. \quad \underbrace{-2.5} + \underbrace{s} + \underbrace{6.4s} - \underbrace{4s^2}$$

$$-2.5 + (\underbrace{1s} + \underline{6.4s}) + (-4s^2)$$

$$-2.5 + 7.4s - 4s^2$$

$$\begin{array}{r} 6.4 \\ + 1.0 \\ \hline 7.4 \end{array}$$

Simplify the expression. Then evaluate the expression when $x = 3$.

5. $-7x + 12x$

$$\begin{array}{r} 5. \quad \underline{-7x} + \underline{12x} \quad : \quad \underline{x=3} \\ \underline{-7(3)} + \underline{12(3)} \\ -21 + 36 \\ 15 \end{array}$$

$$\begin{array}{r} 5x \\ 5(3) \\ 15 \end{array}$$

Simplify the expression. Then evaluate the expression when $x = 3$.

6. $6x - 4 + 6 - 2x$

$$6. 6x - 4 + 6 - 2x \quad : \quad \underline{x = 3}$$

$$18 - 4 + \cancel{6} - \cancel{6}$$

$$14$$

~

$$4x + 2$$

$$12 + 2$$

$$14$$

~

Simplify the expression. Then evaluate the expression when $x = 3$.

7. $3x^2 + 5x - x^2$

Simplify the expression. Then evaluate the expression when $x = 3$.

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

Simplify the expression. Then evaluate the expression when $x = 3$.

9. $3 - 2(4 + x) - 7$

Simplify the expression. Then evaluate the expression when $x = 3$.

10. $\frac{2}{3}x - \frac{1}{2} + 2x - x^2$

Simplify the expression. Then evaluate the expression when $x = 3$.

11. $6x^2 - 4 + 2(x^2 - 3)$

Simplify the expression. Then evaluate the expression when $x = 3$.

12. $3(x^2 + 4) - 4x + 6$