

# Simplifying Expressions

Name: \_\_\_\_\_ Score: \_\_\_\_\_

Simplify the following expressions.

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

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

$$4 - d^2 + 2d^2 - d$$

$$c^2 + y - 5y + c^2$$

$$1 - xy - 2 - xy$$

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

$$u - 3bu + 1 - bu$$

$$a^2 + 2 + a - 2a^2$$

$$-2y^2 - 2y^2 + y + 2y$$

$$r + r^2 - r$$

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

$$8 + 10x^2 - x^2$$

$$r^2 - r + 3r - r^2$$

$$t^2 - 5t + 5t - t^2$$

$$5 + w + 2w^2 - w^2$$

$$3r - 6 + r + 3r^2$$

$$3a + 3a^2 - 4a^2 + 5a$$

$$5q^3 + 5q^2 - 2q^3 - 2q^2$$
$$3q^3 - 3q^2$$

$$-r - 6 + 2r - 9$$

$$u^3 + 4u + u^2 - 2u$$

$$1 + av + 3 - 3a$$

# Answers

Simplify the following expressions.

$$\begin{aligned} &x + 3x - 4x^2 - x \\ &-4x^2 + 3x \end{aligned}$$

$$\begin{aligned} &x + 2x^2 - 4x^2 - 5x^2 \\ &-7x^2 + x \end{aligned}$$

$$\begin{aligned} &4 - d^2 + 2d^2 - d \\ &d^2 - d + 4 \end{aligned}$$

$$\begin{aligned} &c^2 + y - 5y + c^2 \\ &2c^2 - 4y \end{aligned}$$

$$\begin{aligned} &1 - xy - 2 - xy \\ &-2xy - 1 \end{aligned}$$

$$\begin{aligned} &2x^2 + x + 4x - 3x \\ &2x^2 + 2x \end{aligned}$$

$$\begin{aligned} &u - 3bu + 1 - bu \\ &-4bu + u + 1 \end{aligned}$$

$$\begin{aligned} &a^2 + 2 + a - 2a^2 \\ &-a^2 + a + 2 \end{aligned}$$

$$\begin{aligned} &-2y^2 - 2y^2 + y + 2y \\ &-4y^2 + 3y \end{aligned}$$

$$\begin{aligned} &r + r^2 - r \\ &r^2 \end{aligned}$$

$$\begin{aligned} &6x^2 - 5 + 6 \\ &6x^2 + 1 \end{aligned}$$

$$\begin{aligned} &8 + 10x^2 - x^2 \\ &9x^2 + 8 \end{aligned}$$

$$\begin{aligned} &r^2 - r + 3r - r^2 \\ &2r \end{aligned}$$

$$\begin{aligned} &t^2 - 5t + 5t - t^2 \\ &0 \end{aligned}$$

$$\begin{aligned} &5 + w + 2w^2 - w^2 \\ &w^2 + w + 5 \end{aligned}$$

$$\begin{aligned} &3r - 6 + r + 3r^2 \\ &3r^2 + 4r - 6 \end{aligned}$$

$$\begin{aligned} &3a + 3a^2 - 4a^2 + 5a \\ &-a^2 + 8a \end{aligned}$$

$$\begin{aligned} &5q^3 + 5q^2 - 2q^3 - 2q^2 \\ &3q^3 + 3q^2 \end{aligned}$$

$$\begin{aligned} &-r - 6 + 2r - 9 \\ &r - 15 \end{aligned}$$

$$\begin{aligned} &u^3 + 4u + u^2 - 2u \\ &u^3 + u^2 + 2u \end{aligned}$$

$$\begin{aligned} &1 + av + 3 - 3a \\ &av - 3a + 4 \end{aligned}$$