

## Simplifying Expressions (E)

Simplify each expression.

1.  $1 - 9a + \frac{a^3}{a}$

6.  $-3x^2 \cdot 10x + \frac{2x^3}{x}$

2.  $-y^2 - 10 - 9y - y$

7.  $-\frac{2c^3}{-c^2} + 7 + c^2$

3.  $-9z - \frac{70z^2}{10} + 8$

8.  $b^2 - 4b^2 + b^2 + 4b^2$

4.  $x - 1 + 2 + 1$

9.  $4 + u^2 + \frac{48}{6}$

5.  $-b \cdot (-7) + \frac{8b^3}{8b^2}$

10.  $y + y \cdot y^2 \cdot (-1)$

## Simplifying Expressions (E) Answers

Simplify each expression.

$$\begin{aligned} 1. \quad & 1 - 9a + \frac{a^3}{a} \\ & = a^2 - 9a + 1 \end{aligned}$$

$$\begin{aligned} 6. \quad & -3x^2 \cdot 10x + \frac{2x^3}{x} \\ & = -30x^3 + 2x^2 \end{aligned}$$

$$\begin{aligned} 2. \quad & -y^2 - 10 - 9y - y \\ & = -y^2 - 10y - 10 \end{aligned}$$

$$\begin{aligned} 7. \quad & -\frac{2c^3}{-c^2} + 7 + c^2 \\ & = c^2 + 2c + 7 \end{aligned}$$

$$\begin{aligned} 3. \quad & -9z - \frac{70z^2}{10} + 8 \\ & = -7z^2 - 9z + 8 \end{aligned}$$

$$\begin{aligned} 8. \quad & b^2 - 4b^2 + b^2 + 4b^2 \\ & = 2b^2 \end{aligned}$$

$$\begin{aligned} 4. \quad & x - 1 + 2 + 1 \\ & = x + 2 \end{aligned}$$

$$\begin{aligned} 9. \quad & 4 + u^2 + \frac{48}{6} \\ & = u^2 + 12 \end{aligned}$$

$$\begin{aligned} 5. \quad & -b \cdot (-7) + \frac{8b^3}{8b^2} \\ & = 8b \end{aligned}$$

$$\begin{aligned} 10. \quad & y + y \cdot y^2 \cdot (-1) \\ & = -y^3 + y \end{aligned}$$