

Simplifying Expressions (E)

Simplify each expression.

1. $-1 - 1 - 1 + a + 2a$

6. $1 - 10a^2 + 4 + ax - 3x$

2. $z \cdot 7v \cdot 7vz + 4 \cdot v^2$

7. $-y \cdot 4 \cdot 4z \cdot (-4yz) \cdot 9z^2$

3. $u^2 \cdot 8 \cdot (-y) \cdot 8 \cdot (-2)$

8. $1 - 7a^2 \cdot (-1) \cdot \frac{3b}{3}$

4. $9 + \frac{4y^2}{4y^2} - 6 + 4v$

9. $av \cdot (-1) + 9v^2 - 2v + 9v^2$

5. $1 - 8x - x - 10x - 2$

10. $4 \cdot (-1) \cdot 10 \cdot (-4x^2) \cdot (-x)$

Simplifying Expressions (E) Answers

Simplify each expression.

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

$$\begin{aligned} 6. & 1 - 10a^2 + 4 + ax - 3x \\ & = -10a^2 + ax - 3x + 5 \end{aligned}$$

$$\begin{aligned} 2. & z \cdot 7v \cdot 7vz + 4 \cdot v^2 \\ & = 49v^2z^2 + 4v^2 \end{aligned}$$

$$\begin{aligned} 7. & -y \cdot 4 \cdot 4z \cdot (-4yz) \cdot 9z^2 \\ & = 576y^2z^4 \end{aligned}$$

$$\begin{aligned} 3. & u^2 \cdot 8 \cdot (-y) \cdot 8 \cdot (-2) \\ & = 128u^2y \end{aligned}$$

$$\begin{aligned} 8. & 1 - 7a^2 \cdot (-1) \cdot \frac{3b}{3} \\ & = 7a^2b + 1 \end{aligned}$$

$$\begin{aligned} 4. & 9 + \frac{4y^2}{4y^2} - 6 + 4v \\ & = 4v + 4 \end{aligned}$$

$$\begin{aligned} 9. & av \cdot (-1) + 9v^2 - 2v + 9v^2 \\ & = -av + 18v^2 - 2v \end{aligned}$$

$$\begin{aligned} 5. & 1 - 8x - x - 10x - 2 \\ & = -19x - 1 \end{aligned}$$

$$\begin{aligned} 10. & 4 \cdot (-1) \cdot 10 \cdot (-4x^2) \cdot (-x) \\ & = -160x^3 \end{aligned}$$