

Simplifying Expressions (F)

Simplify each expression.

1. $-\frac{18av}{-3av} - 3av \cdot 10v \cdot v$

6. $8 + \frac{63u^2}{7u} - \frac{3u}{3u}$

2. $c + 1 + 5b - c + 1$

7. $-4v - \frac{4v}{4} + 1 + z$

3. $a - a^2 + a \cdot 5a - 6c$

8. $a^2 + 1 - 1 + 6z^2 + z$

4. $\frac{z^2}{z} + \frac{z^2}{z} + 5z$

9. $7 - vx + 5 - 3vx \cdot 8$

5. $7u + \frac{16ux}{8ux} \cdot 9 + 4$

10. $-4x^2 - 10 - x^2 \cdot (-7x) - 4$

Simplifying Expressions (F) Answers

Simplify each expression.

$$\begin{aligned} 1. \quad & -\frac{18av}{-3av} - 3av \cdot 10v \cdot v \\ & = -30av^3 + 6 \end{aligned}$$

$$\begin{aligned} 6. \quad & 8 + \frac{63u^2}{7u} - \frac{3u}{3u} \\ & = 9u + 7 \end{aligned}$$

$$\begin{aligned} 2. \quad & c + 1 + 5b - c + 1 \\ & = 5b + 2 \end{aligned}$$

$$\begin{aligned} 7. \quad & -4v - \frac{4v}{4} + 1 + z \\ & = -5v + z + 1 \end{aligned}$$

$$\begin{aligned} 3. \quad & a - a^2 + a \cdot 5a - 6c \\ & = 4a^2 + a - 6c \end{aligned}$$

$$\begin{aligned} 8. \quad & a^2 + 1 - 1 + 6z^2 + z \\ & = a^2 + 6z^2 + z \end{aligned}$$

$$\begin{aligned} 4. \quad & \frac{z^2}{z} + \frac{z^2}{z} + 5z \\ & = 7z \end{aligned}$$

$$\begin{aligned} 9. \quad & 7 - vx + 5 - 3vx \cdot 8 \\ & = -25vx + 12 \end{aligned}$$

$$\begin{aligned} 5. \quad & 7u + \frac{16ux}{8ux} \cdot 9 + 4 \\ & = 7u + 22 \end{aligned}$$

$$\begin{aligned} 10. \quad & -4x^2 - 10 - x^2 \cdot (-7x) - 4 \\ & = 7x^3 - 4x^2 - 14 \end{aligned}$$