

## Simplifying Expressions (A)

Simplify each expression.

1.  $a^2 \cdot \frac{a}{a} \cdot 6 \cdot (-8)$

6.  $8 \cdot \left(-\frac{48x}{-8x}\right) \cdot (-b^2) \cdot (-b)$

2.  $-7 \cdot (-v^2) \cdot 4 \cdot (-1) \cdot (-av)$

7.  $-b \cdot 10b^2 \cdot \left(-\frac{12by^2}{3b}\right) \cdot 7b^2$

3.  $-9 \cdot \frac{40v^2}{8 \cdot 5v^2} \cdot v$

8.  $-av \cdot 9 \cdot v \cdot 5 \cdot a^2$

4.  $4c^2 \cdot (-b) \cdot \left(-\frac{2b^2c^2}{b \cdot (-2bc)}\right)$

9.  $a \cdot (-av) \cdot 7a^2 \cdot (-7av) \cdot (-a^2)$

5.  $-\frac{10y}{2 \cdot (-5y)} \cdot x^2 \cdot xy$

10.  $10 \cdot y \cdot (-8x) \cdot \frac{9x}{9}$

## Simplifying Expressions (A) Answers

Simplify each expression.

$$\begin{aligned} 1. a^2 \cdot \frac{a}{a} \cdot 6 \cdot (-8) \\ = -48a^2 \end{aligned}$$

$$\begin{aligned} 6. 8 \cdot \left( -\frac{48x}{-8x} \right) \cdot (-b^2) \cdot (-b) \\ = 48b^3 \end{aligned}$$

$$\begin{aligned} 2. -7 \cdot (-v^2) \cdot 4 \cdot (-1) \cdot (-av) \\ = 28av^3 \end{aligned}$$

$$\begin{aligned} 7. -b \cdot 10b^2 \cdot \left( -\frac{12by^2}{3b} \right) \cdot 7b^2 \\ = 280b^5y^2 \end{aligned}$$

$$\begin{aligned} 3. -9 \cdot \frac{40v^2}{8 \cdot 5v^2} \cdot v \\ = -9v \end{aligned}$$

$$\begin{aligned} 8. -av \cdot 9 \cdot v \cdot 5 \cdot a^2 \\ = -45a^3v^2 \end{aligned}$$

$$\begin{aligned} 4. 4c^2 \cdot (-b) \cdot \left( -\frac{2b^2c^2}{b \cdot (-2bc)} \right) \\ = -4bc^3 \end{aligned}$$

$$\begin{aligned} 9. a \cdot (-av) \cdot 7a^2 \cdot (-7av) \cdot (-a^2) \\ = -49a^7v^2 \end{aligned}$$

$$\begin{aligned} 5. -\frac{10y}{2 \cdot (-5y)} \cdot x^2 \cdot xy \\ = x^3y \end{aligned}$$

$$\begin{aligned} 10. 10 \cdot y \cdot (-8x) \cdot \frac{9x}{9} \\ = -80x^2y \end{aligned}$$