

Simplifying Expressions (E)

Simplify each expression.

1. $8vy \cdot \frac{24v^2y}{6v \cdot 4} \cdot (-v^2)$

6. $b^2 \cdot bx \cdot \left(-\frac{b^2}{-1}\right) \cdot (-5)$

2. $\frac{1728c^5y^3}{6c^2 \cdot 8cy \cdot (-c) \cdot 9y}$

7. $10 \cdot \left(-\frac{3c^3z}{3c^2 \cdot (-z)}\right) \cdot 8cz$

3. $u \cdot (-c) \cdot (-u) \cdot c \cdot (-10)$

8. $\frac{4uz^6}{uz \cdot (-4z^2) \cdot (-z)} \cdot z^2$

4. $10a^2 \cdot (-5) \cdot (-1) \cdot 5z \cdot a^2$

9. $2 \cdot (-4y^2) \cdot \frac{9y}{-1 \cdot y}$

5. $-1 \cdot (-1) \cdot (-4) \cdot (-6y) \cdot (-y)$

10. $ux \cdot (-x) \cdot u \cdot \frac{5x^3}{x}$

Simplifying Expressions (E) Answers

Simplify each expression.

$$\begin{aligned} 1. & 8vy \cdot \frac{24v^2y}{6v \cdot 4} \cdot (-v^2) \\ & = -8v^4y^2 \end{aligned}$$

$$\begin{aligned} 6. & b^2 \cdot bx \cdot \left(-\frac{b^2}{-1}\right) \cdot (-5) \\ & = -5b^5x \end{aligned}$$

$$\begin{aligned} 2. & \frac{1728c^5y^3}{6c^2 \cdot 8cy \cdot (-c) \cdot 9y} \\ & = -4cy \end{aligned}$$

$$\begin{aligned} 7. & 10 \cdot \left(-\frac{3c^3z}{3c^2 \cdot (-z)}\right) \cdot 8cz \\ & = 80c^2z \end{aligned}$$

$$\begin{aligned} 3. & u \cdot (-c) \cdot (-u) \cdot c \cdot (-10) \\ & = -10c^2u^2 \end{aligned}$$

$$\begin{aligned} 8. & \frac{4uz^6}{uz \cdot (-4z^2) \cdot (-z)} \cdot z^2 \\ & = z^4 \end{aligned}$$

$$\begin{aligned} 4. & 10a^2 \cdot (-5) \cdot (-1) \cdot 5z \cdot a^2 \\ & = 250a^4z \end{aligned}$$

$$\begin{aligned} 9. & 2 \cdot (-4y^2) \cdot \frac{9y}{-1 \cdot y} \\ & = 72y^2 \end{aligned}$$

$$\begin{aligned} 5. & -1 \cdot (-1) \cdot (-4) \cdot (-6y) \cdot (-y) \\ & = -24y^2 \end{aligned}$$

$$\begin{aligned} 10. & ux \cdot (-x) \cdot u \cdot \frac{5x^3}{x} \\ & = -5u^2x^4 \end{aligned}$$