

Simplifying Expressions

Simplify each expression.

1. $u \cdot \left(-\frac{81u^3}{9u}\right)$

6. $b^2 \cdot \frac{2b^3}{2b}$

2. $v^2 \cdot \left(-\frac{4}{4}\right)$

7. $5x \cdot 6x \cdot x$

3. $-\frac{126z^3}{7z^2 \cdot 9}$

8. $-8 \cdot 5y \cdot y^2$

4. $-\frac{3b^2}{-b} \cdot (-9b^2)$

9. $\frac{81u^6}{-9u^2 \cdot 3u^2}$

5. $-\frac{16x^2}{-8x^2} \cdot x$

10. $-y \cdot \left(-\frac{2y}{-y}\right)$

Simplifying Expressions Answers

Simplify each expression.

$$\begin{aligned} 1. \quad & u \cdot \left(-\frac{81u^3}{9u} \right) \\ & = -9u^3 \end{aligned}$$

$$\begin{aligned} 6. \quad & b^2 \cdot \frac{2b^3}{2b} \\ & = b^4 \end{aligned}$$

$$\begin{aligned} 2. \quad & v^2 \cdot \left(-\frac{4}{4} \right) \\ & = -v^2 \end{aligned}$$

$$\begin{aligned} 7. \quad & 5x \cdot 6x \cdot x \\ & = 30x^3 \end{aligned}$$

$$\begin{aligned} 3. \quad & -\frac{126z^3}{7z^2 \cdot 9} \\ & = -2z \end{aligned}$$

$$\begin{aligned} 8. \quad & -8 \cdot 5y \cdot y^2 \\ & = -40y^3 \end{aligned}$$

$$\begin{aligned} 4. \quad & -\frac{3b^2}{-b} \cdot (-9b^2) \\ & = -27b^3 \end{aligned}$$

$$\begin{aligned} 9. \quad & \frac{81u^6}{-9u^2 \cdot 3u^2} \\ & = -3u^2 \end{aligned}$$

$$\begin{aligned} 5. \quad & -\frac{16x^2}{-8x^2} \cdot x \\ & = 2x \end{aligned}$$

$$\begin{aligned} 10. \quad & -y \cdot \left(-\frac{2y}{-y} \right) \\ & = -2y \end{aligned}$$