

Simplifying Expressions (D)

Simplify each expression.

1. $7y \cdot \frac{24a^4y}{8ay \cdot 3a}$

6. $cy + \frac{40c^2}{10} + y^2$

2. $-3vx - x + vx + 1$

7. $\frac{y^4}{y^2} + 6y - 7$

3. $7c \cdot 9c^2 + 2c^2 + 6c^2$

8. $x^2 + \frac{10b^2x^2}{10b^2} - 10b$

4. $4z \cdot \frac{9yz^4}{3z \cdot 3z^2}$

9. $u \cdot \frac{48u^3z}{8uz \cdot 6u}$

5. $8b^2 + b + \frac{36b^2z}{6bz}$

10. $-7y^2 \cdot \left(-\frac{20c^2y}{10y}\right) \cdot (-10)$

Simplifying Expressions (D) Answers

Simplify each expression.

$$\begin{aligned} 1. \quad & 7y \cdot \frac{24a^4y}{8ay \cdot 3a} \\ & = 7a^2y \end{aligned}$$

$$\begin{aligned} 6. \quad & cy + \frac{40c^2}{10} + y^2 \\ & = cy + 4c^2 + y^2 \end{aligned}$$

$$\begin{aligned} 2. \quad & -3vx - x + vx + 1 \\ & = -2vx - x + 1 \end{aligned}$$

$$\begin{aligned} 7. \quad & \frac{y^4}{y^2} + 6y - 7 \\ & = y^2 + 6y - 7 \end{aligned}$$

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

$$\begin{aligned} 8. \quad & x^2 + \frac{10b^2x^2}{10b^2} - 10b \\ & = 2x^2 - 10b \end{aligned}$$

$$\begin{aligned} 4. \quad & 4z \cdot \frac{9yz^4}{3z \cdot 3z^2} \\ & = 4yz^2 \end{aligned}$$

$$\begin{aligned} 9. \quad & u \cdot \frac{48u^3z}{8uz \cdot 6u} \\ & = u^2 \end{aligned}$$

$$\begin{aligned} 5. \quad & 8b^2 + b + \frac{36b^2z}{6bz} \\ & = 8b^2 + 7b \end{aligned}$$

$$\begin{aligned} 10. \quad & -7y^2 \cdot \left(-\frac{20c^2y}{10y} \right) \cdot (-10) \\ & = -140c^2y^2 \end{aligned}$$