

Simplifying Expressions (D)

Simplify each expression.

1. $y + x + 1 + 1 - 9$

6. $-4 - ax + 6x + x - ax$

2. $2uv + \frac{5u^3v}{u \cdot 5uv} - v^2$

7. $9by + 8 + 9b^2 - \frac{b^2y^2}{b^2}$

3. $-7x \cdot bx \cdot \left(-\frac{30b^2x}{2b^2 \cdot 3}\right)$

8. $u^2 \cdot 4z + 4u^2 \cdot uz \cdot 3z^2$

4. $y^2 + y^2 \cdot 6y^2 + 1 + 10y$

9. $-2z^2 \cdot (-10) + z^2 + 4 \cdot (-2z)$

5. $-6 - 2u + bu + bu - 9$

10. $6 + 2 + 10 + a \cdot 7$

Simplifying Expressions (D) Answers

Simplify each expression.

$$\begin{aligned} 1. & y + x + 1 + 1 - 9 \\ & = y + x - 7 \end{aligned}$$

$$\begin{aligned} 6. & -4 - ax + 6x + x - ax \\ & = -2ax + 7x - 4 \end{aligned}$$

$$\begin{aligned} 2. & 2uv + \frac{5u^3v}{u \cdot 5uv} - v^2 \\ & = 2uv - v^2 + u \end{aligned}$$

$$\begin{aligned} 7. & 9by + 8 + 9b^2 - \frac{b^2y^2}{b^2} \\ & = 9by + 9b^2 - y^2 + 8 \end{aligned}$$

$$\begin{aligned} 3. & -7x \cdot bx \cdot \left(-\frac{30b^2x}{2b^2 \cdot 3} \right) \\ & = 35bx^3 \end{aligned}$$

$$\begin{aligned} 8. & u^2 \cdot 4z + 4u^2 \cdot uz \cdot 3z^2 \\ & = 12u^3z^3 + 4u^2z \end{aligned}$$

$$\begin{aligned} 4. & y^2 + y^2 \cdot 6y^2 + 1 + 10y \\ & = 6y^4 + y^2 + 10y + 1 \end{aligned}$$

$$\begin{aligned} 9. & -2z^2 \cdot (-10) + z^2 + 4 \cdot (-2z) \\ & = 21z^2 - 8z \end{aligned}$$

$$\begin{aligned} 5. & -6 - 2u + bu + bu - 9 \\ & = 2bu - 2u - 15 \end{aligned}$$

$$\begin{aligned} 10. & 6 + 2 + 10 + a \cdot 7 \\ & = 7a + 18 \end{aligned}$$