

1. Simplify this expression: $8 + 3(2w - 7) + \frac{5}{3}(27w + 6)$

Solve each.

2. $2 - 5(c + 7) + c \geq 18$

3. $5 + p - 3 + 4p = \frac{10p + 7}{2}$

Simplify each.

4. $\sqrt{112}$

5. $\sqrt[3]{162}$

1. Simplify this expression: $8 + 3(2w - 7) + \frac{5}{3}(27w + 6)$

$$8 + 6w - 21 + 45w + 10$$

$$51w - 3$$

Solve each.

2. $2 - 5(c + 7) + c \geq 18$

$$2 - 5c - 35 + c \geq 18$$

$$-4c - 33 \geq 18$$

$$\frac{-4c}{-4} \geq \frac{51}{-4}$$

$$c \leq -\frac{51}{4}$$

3. $5 + p - 3 + 4p = \frac{10p + 7}{2}$

$$2(2 + 5p) = \frac{10p + 7}{2} \cdot 2$$

$$4 + 10p = 10p + 7$$

$$4 = 7 \rightarrow \text{FALSE}$$

$$\text{NO SOLUTION}$$

Simplify each.

4. $\sqrt{112} = \sqrt{16 \cdot 7}$

$$= \sqrt{16} \cdot \sqrt{7}$$

$$= 4\sqrt{7}$$

5. $\sqrt[3]{162}$

$$= \sqrt[3]{27 \cdot 6}$$

$$= \sqrt[3]{27} \cdot \sqrt[3]{6}$$

$$= 3\sqrt[3]{6}$$

$$2^3 = 8$$

$$3^3 = 27$$

$$4^3 = 64$$

$$5^3 = 125$$