

Algebra 1 Bellwork Wednesday, September 16, 2015

Simplify each. Do NOT use a calculator for these problems.

1. $4 + 2(4^2 - 11)^2$

2. $17 - 2[1 + (5 - 2)^2] + 8$

3. $24 \div -3|6 - (2)^3| - |-7 + 2|$

Solve each equation. Do NOT use a calculator for these problems.

4. $-3 + w = -14$

5. $\frac{c}{4} = 12$

6. $-5k = 40$

7. $-g = 20$

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Answers

Simplify each. Do NOT use a calculator for these problems.

$$\begin{aligned} 1. & 4 + 2(4^2 - 11)^2 \\ & = 4 + 2(16 - 11)^2 = 4 + 50 \\ & = 4 + 2(5)^2 = 54 \\ & = 4 + 2(25) \end{aligned}$$

$$\begin{aligned} 2. & 17 - 2[1 + (5 - 2)^2] + 8 \\ & \qquad \qquad \qquad \downarrow \\ & \qquad \qquad \qquad (3)^2 \\ & \qquad \qquad \qquad [1 + 9] \end{aligned}$$

$$\begin{aligned} 3. & 24 \div -3|6 - (2)^3| - |-7 + 2| \\ & \qquad |6 - 8| - |-5| \\ & \qquad | -2 | - | -5 | \\ & = 24 \div -3(2) - 5 \\ & = -8(2) - 5 = -16 - 5 = -21 \end{aligned}$$

$$\begin{aligned} & = 17 - 2[10] + 8 \\ & = 17 - 20 + 8 \\ & = -3 + 8 = 5 \end{aligned}$$

Solve each equation. Do NOT use a calculator for these problems.

$$\begin{aligned} 4. & -3 + w = -14 \\ & +3 \qquad +3 \\ & \qquad \qquad \qquad w = -11 \end{aligned}$$

$$\begin{aligned} 5. & 4 \cdot \frac{c}{4} = 12 \cdot 4 \\ & \qquad \qquad \qquad c = 48 \end{aligned}$$

$$\begin{aligned} 6. & -5k = 40 \\ & \underline{-5} \quad \underline{-5} \\ & \qquad \qquad k = -8 \end{aligned}$$

$$\begin{aligned} 7. & -g = 20 \\ & \underline{-1} \quad \underline{-1} \\ & \qquad \qquad g = -20 \end{aligned}$$