Algebra 1 Bellwork September 25, 2014

1. When the baker turned off the oven the temperature was $400°F$. The oven cooled off $14°F$ per min. After a while the temperature in the oven was $85°F$. Write and solve an equation to find the number of minutes it took the oven to cool from $400°F$ down to $85°F$.

Solve each equation.

2. $8 - 2Q = 31$

3. $56 + \frac{G}{6} = 37$

4. $-25 = -9 - \frac{7}{3}P$

5. $\frac{11 + C}{5} = 8$

6. $-8 - X = 41$

7. $4(W - 5) = 12$

8. Do a Boolean check to see if $x = 1.25$ is a solution to the following equation: $\sqrt{20x} + 2 = Log(800x) + 4$

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m = # min after oven turned off

EQ: $400 - 14m = 85$

m = 22.5 min

Solve each equation.

2. $8 - 2Q = 31$

$-8 \quad -8$

$\frac{-2Q}{-2} = \frac{23}{-2}$

Q = -11.5

3. $56 + \frac{G}{6} = 37$

$-56 \quad -56$

$6 \cdot \frac{G}{6} = -19 \cdot 6$

G = -114

4. $-25 = -9 - \frac{7}{3}P$

$+9 \quad +9$

$-\frac{3}{7} \cdot -16 = -\frac{7}{3}P \cdot -\frac{3}{7}$

$P = \frac{48}{7}$

5. $5 \cdot \left(\frac{11 + C}{5}\right) = 8 \cdot 5$

$11 + C = 40$

$-11 \quad -11$

C = 29

6. $-8 - X = 41$

$+8 \quad +8$

$-X = 49$

X = -49

7. $4(W - 5) = 12$

$\frac{4(w-5)}{4} = \frac{12}{4}$

$w - 5 = 3$

$+5 \quad +5$

w = 8

or

$4w - 20 = 12$

$+20 \quad +20$

$\frac{4w}{4} = \frac{32}{4}$

8. Do a Boolean check to see if $x = 1.25$ is a solution to the following equation: $\sqrt{20x} + 2 = Log(800x) + 4$

Yes, X = 1.25 is a solution