Algebra 1 Bellwork Tuesday, October 13, 2015

Find the exact solution to each equation.

1. $5 - \frac{9}{7}w = -3$

2. $\frac{11 - m}{6} = 8$

3. You went to the store and bought some apples at \$0.79 each. You bought 2 more pears than apples and they cost \$1.15 each. You also bought a gallon of milk for \$2.99. Your bill at the cash register was for a total of \$13.05. Write and solve an equation to find the number of apples and pears purchased.

# of Apples =

# of Pears =

4. Two angles are supplementary. One of the angles is six less than twice the other angle. Write and solve an equation to find the measure of both angles. (Two angles are supplementary if they have a sum of 180°)

Algebra 1 Bellwork Tuesday, October 13, 2015 ANSWERS

Find the exact solution to each equation.

1. $5 - \frac{9}{7}w = -3$
$-5 \quad -5$
$\left(-\frac{7}{9}\right)\left(-\frac{9}{7}w\right) = (-8)\left(-\frac{7}{9}\right)$
$w = \frac{56}{9}$

2. $6\left(\frac{11 - m}{6}\right) = (8) \cdot 6$
$11 - m = 48$
$-11 \quad -11$
$\frac{-m}{-1} = \frac{37}{-1}$
$m = -37$

3. You went to the store and bought some apples at \$0.79 each. You bought 2 more pears than apples and they cost \$1.15 each. You also bought a gallon of milk for \$2.99. Your bill at the cash register was for a total of \$13.05. Write and solve an equation to find the number of apples and pears purchased.

# of Apples = 4

# of Pears = 6

Variables:
x = # apples
$x+2$ = # pears

EQ:
$.79x + 1.15(x+2) + 2.99 = 13.05$
$.79x + 1.15x + 2.30 + 2.99 = 13.0$
$1.94x + 5.29 = 13.05$
$-5.29 \quad -5.29$
$\frac{1.94x}{1.94} = \frac{7.76}{1.94}$
$x = 4$

4. Two angles are supplementary. One of the angles is six less than twice the other angle. Write and solve an equation to find the measure of both angles. (Two angles are supplementary if they have a sum of 180°)

THE 2 ANGLES ARE
62° & 118°

Variables
x = one of unknown angles
$2x-6$ = other unknown angle

EQ:
$x + 2x - 6 = 180$
$3x - 6 = 180$
$+6 \quad +6$
$3x = 186$
$\frac{3x}{3} = \frac{186}{3}$
$x = 62°$