Algebra 1 Bellwork Tuesday, September 22, 2015

1. Write a variable expression for each statement.

a. Eight less than the quotient of a five and a number.

b. The difference of twelve and a number.

c. Three more than the product of a number and ten.

2. There are 5280 feet in a mile. Write an equation for the number of feet in an unknown number of miles. Define your variables.

EQ: Variables:

3. There are 36 inches in a yard. Write an equation for the number yards in an unknown number of inches. Define your variables.

EQ: Variables:

4. Write an equation to model the data in the table.

Gallons of Gas purchased	2	3	6	10
Money Spent	5.00	7.50	15.00	25.00

EQ: Variables:

5. Simplify. $5 - |4 - 7| + 2(3 - 6((7 - 1)^2 \div 6 - 4)^3 \div 4)$

Algebra 1 Bellwork Tuesday, September 22, 2015 Answers

1. Write a variable expression for each statement.

a. Eight less than the quotient of a five and a number. $5/m - 8$

b. The difference of twelve and a number. $12 - 9$

c. Three more than the product of a number and ten. $x \cdot 10 + 3$

2. There are 5280 feet in a mile. Write an equation for the number of feet in an unknown number of miles. Define your variables.

EQ: $f = 5280 \cdot m$ Variables: m = # miles, f = # feet

3. There are 36 inches in a yard. Write an equation for the number yards in an unknown number of inches. Define your variables.

EQ: $y = \frac{I}{36}$ Variables: I = # inches, y = # yards

4. Write an equation to model the data in the table.

Gallons of Gas purchased	2	3	6	10
Money Spent	5.00	7.50	15.00	25.00

EQ: $m = 2.50G$ or $G = \frac{m}{2.50}$ or $\frac{m}{G} = 2.50$

Variables: G = # gallon, m = $ spent

5. Simplify. $5 - |4 - 7| + 2(3 - 6((7 - 1)^2 \div 6 - 4)^3 \div 4)$

$(3 - 12)$ $(6)^2$ $36 \div 6$ $6 - 4$ $6(2)^3$ $6 \cdot 8$ $(3 - 48 \div 4)$

$5 - |-3| + 2(-9)$

$5 - 3 + -18$

$2 + -18 = -16$