Algebra 1 6th hour Bellwork Friday, December 18, 2015

For 1 to 4, write a function rule for each situation. Define your variables.

1. The total hours spent cutting lawns is a function of the number of lawns you cut. Each lawn takes 1hr and 30 minutes to cut.

EQ: Variables:

2. A rental car costs $18.50 for the day plus 25 cents per mile for every mile over 150 miles.

EQ: Variables:

3. The amount of Yolanda's paycheck is a function of how much merchandise she sells. She receives 6% commission on all sales.

EQ: Variables:

4. The number of stamps Juan has is a function of the number of stamps Ali has. Juan has three more stamps than Ali does.

EQ: Variables:

5. A towing company charges $75 to come to where your car is broken down and 85 cents per mile to tow your car.

a) How much will you have to pay if you need to have them tow your car 15 miles to your favorite repair shop?

b) How far did they tow your car if the total bill was $109?

6. You sold 24 necklaces at the craft fair for $190.80.

a) How many necklaces did you sell if you made $143.10?

b) How much would you make if you sold 13 necklaces?

Algebra 1 6th hour Bellwork Friday, December 18, 2015 ANSWERS

For 1 to 4, write a function rule for each situation. Define your variables.

1. The total hours spent cutting lawns is a function of the number of lawns you cut. Each lawn takes 1hr and 30 minutes to cut.

EQ: $h = 1.5L$ Variables: h = total hours, L = # lawns cut

2. A rental car costs $18.50 for the day plus 25 cents per mile for every mile over 150 miles.

EQ: $T = 18.50 + .25m$ Variables: T = TOTAL COST $, m = # miles over 150

3. The amount of Yolanda's paycheck is a function of how much merchandise she sells. She receives 6% commission on all sales.

EQ: $P = .06m$ Variables: P = amount of paycheck, m = amt of merchandise sold

4. The number of stamps Juan has is a function of the number of stamps Ali has. Juan has three more stamps than Ali does.

EQ: $J = A + 3$ Variables: J = # stamps Juan has, A = # stamps Ali has

5. A towing company charges $75 to come to where your car is broken down and 85 cents per mile to tow your car.

a) How much will you have to pay if you need to have them tow your car 15 miles to your favorite repair shop?

$C = 75 + .85(15) =$ $87.75

EQ: $C = 75 + .85m$

Variables: C = Total charge, m = # miles towed

b) How far did they tow your car if the total bill was $109?

$109 = 75 + .85m$ (−75, −75) → $\frac{34}{.85} = \frac{.85m}{.85}$

$m = 40$ mi

6. You sold 24 necklaces at the craft fair for $190.80. → $\frac{\$190.80}{24 \text{ necklaces}} = \$7.95$ each

EQ: $A = 7.95N$

Variables: N = # necklaces sold, A = Amount $ made

a) How many necklaces did you sell if you made $143.10?

$\frac{143.10}{7.95} = \frac{7.95N}{7.95}$ → 18 necklaces

b) How much would you make if you sold 13 necklaces?

$A = 7.95(13) =$ $103.35