Algebra 1 Bellwork Monday, November 10, 2014

For 1 to 3, write an equation to model each situation. Define your variables.

1. You have 75 songs on your i-pod right now and plan to download 4 more each week.

a) EQ:

b) How many songs will you have in 12 weeks?

c) In how many weeks will you have ~~213~~ 283 songs?

2. A group of people went to a ballgame. Nachos cost $5.25 each and Cokes cost $3.50 each. The total amount spent was $84.

a) EQ:

b) If only nachos were purchased, how many could they have bought?

c) If only Cokes were purchased, how many could they have bought?

3. You get paid $8.25 per hour. EQ:

4. What situation could be modeled by this equation? $y = 12x + 20$

Algebra 1 Bellwork Monday, November 10, 2014 ANSWERS

For 1 to 3, write an equation to model each situation. Define your variables.

1. You have 75 songs on your i-pod right now and plan to download 4 more each week.

a) EQ: $T = 75 + 4w$

T = TOTAL # SONGS
w = # WEEKS

b) How many songs will you have in 12 weeks?

$T = 75 + 4(12) = 123$ songs

c) In how many weeks will you have ~~213~~ 283 songs?

$283 = 75 + 4w$
$-75 \quad -75$
$\frac{208}{4} = \frac{4w}{4}$

52 WKS

2. A group of people went to a ballgame. Nachos cost $5.25 each and Cokes cost $3.50 each. The total amount spent was $84.

a) EQ: $5.25N + 3.50C = 84$

N = # NACHOS
C = # COKES

b) If only nachos were purchased, how many could they have bought?

$84 = 5.25N + 3.50(0)$
$84 = 5.25N$

N = 16 NACHOS

c) If only Cokes were purchased, how many could they have bought?

$84 = 5.25(0) + 3.50C$
$84 = 3.50C$

C = 24 Cokes

3. You get paid $8.25 per hour.

P = TOTAL PAY h = # HRS

EQ: $P = 8.25h$

4. What situation could be modeled by this equation? $y = 12x + 20$