

# Warm Up

## Grade 9

March 11, 2015



1) To attend the local fair the cost for admission is \$5.25. If you plan to go on rides it is an additional \$2.00 per ticket.

a) Create a table that shows the cost for up to 3 rides

Tickets, $n$	Cost, $C$
<u>0</u>	5.25
<u>1</u>	7.25
<u>2</u>	9.25
<u>3</u>	11.25

*Handwritten notes: Blue arrows point from 5.25 to 7.25, 7.25 to 9.25, and 9.25 to 11.25, each labeled '+2'.*

b) Write an equation that relates the cost,  $C$  in dollars, to the number of tickets,  $n$ , for a ride.

$$C = 2n + 5.25$$

c) How many rides can a student go on for \$57.25?

$$C = 2n + 5.25$$

$$57.25 = 2n + 5.25$$

$$57.25 - 5.25 = 2n + 5.25 - 5.25$$

$$52 = 2n$$

$$\frac{52}{2} = \frac{2n}{2}$$

$$26 = n$$

2) Write an equation that relates the Cost,  $c$ , to the number of hours,  $h$ , when given the following data.

Hours, $h$	Cost, $C$
<u>1</u>	<u>15.75</u>
<u>2</u>	<u>18.50</u>
<u>3</u>	<u>21.25</u>
<u>4</u>	<u>24.00</u>

$$C = 2.75h + \underline{\quad}$$

$$C(1) = 2.75(1) + 13$$

$$\boxed{C = 2.75h + 13}$$

Check  $C = 2.75(3) + 13$   
 $= 8.25 + 13$   
 $= 21.25 \checkmark$

# Homework Questions?

11b) i) As  $t$  increases by 1,  $v$  will increase by 3

ii)  $3t + 2$

iii)  $v(2) = 3(2) + 2$   
 $= 6 + 2$   
 $= 8$  ✓

12)

Figure, $n$	tooth picks, $t$
1	3
2	5
3	7
4	9

$\downarrow +2$   
 $\downarrow +2$   
 $\downarrow +2$

a) As the figure number increases by 1, the # of toothpicks increase by 2.

12b)  $2n + 1$

12c)  $T = 2n + 1$   
 $T = 2(45) + 1$   
 $T = 90 + 1$   
 $T = 91$

12d)  $T = 2n + 1$

12e)  $17 = 2n + 1$   
 $17 - 1 = 2n + 1 - 1$   
 $16 = 2n$   
 $\frac{16}{2} = \frac{2n}{2}$   
 $8 = n$

$$14) a) C = 1.25n + 250$$

$$b) \quad n = 2500$$

$$C = 125(2500) + 250$$

$$C = 3125 + 250$$

$$C = 3375$$

$$14c) \quad C = 1.25(n) + 250$$

$$625 = 1.25(n) + 250$$

$$625 - 250 = 1.25(n) + 250 - 250$$

$$375 = 1.25n$$

$$\frac{375}{1.25} = \frac{1.25}{1.25} n$$

$$300 = n$$

15)

n toppings	cost c
0	9
1	9.75
2	10.50
3	11.25
4	12.00
5	12.75

$$b) C = 0.75n + 9$$

$$c) \quad 15 = 0.75n + 9$$

$$15 - 9 = 0.75n + 9 - 9$$

$$6 = 0.75n$$

$$\frac{6}{0.75} = \frac{0.75n}{0.75}$$

$$8 = n$$

# Class/Homework

## Worksheet



Do We Need More Work???

$$\begin{aligned} A &= 2n + 1 \\ &= 2(3) + 1 \\ &= 6 + 1 \\ &= 7 \end{aligned}$$

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16 to 20

omit 18c

Section 4.1 Extra Practice.doc