



Warm Up Grade 8
Oct. 26, 2016



1) Find the missing value for the ordered pairs of $y = -3x + 2$
(show work)

a) $(-5, \underline{\quad})$

given $x = -5$

$$\begin{aligned}y &= -3(x) + 2 \\ &= \underbrace{-3(-5)} + 2 \\ &= +15 + 2 \\ &= +17\end{aligned}$$

$(-5, \underline{+17})$

A grade 8 class is going on a field trip. The bus seats 24 students. An equation that relates the number of boys on the bus to the number of girls is $b = 24 - g$, where g represents the number of girls and b represents the number of boys.

dependent

independent variable



- Create a table of values for the relation.
- Graph the relation.
- Describe the relationship between the variables in the graph.

g	b
0	24
1	23
2	22
3	21
4	20
5	19

$b = 24 - (g)$

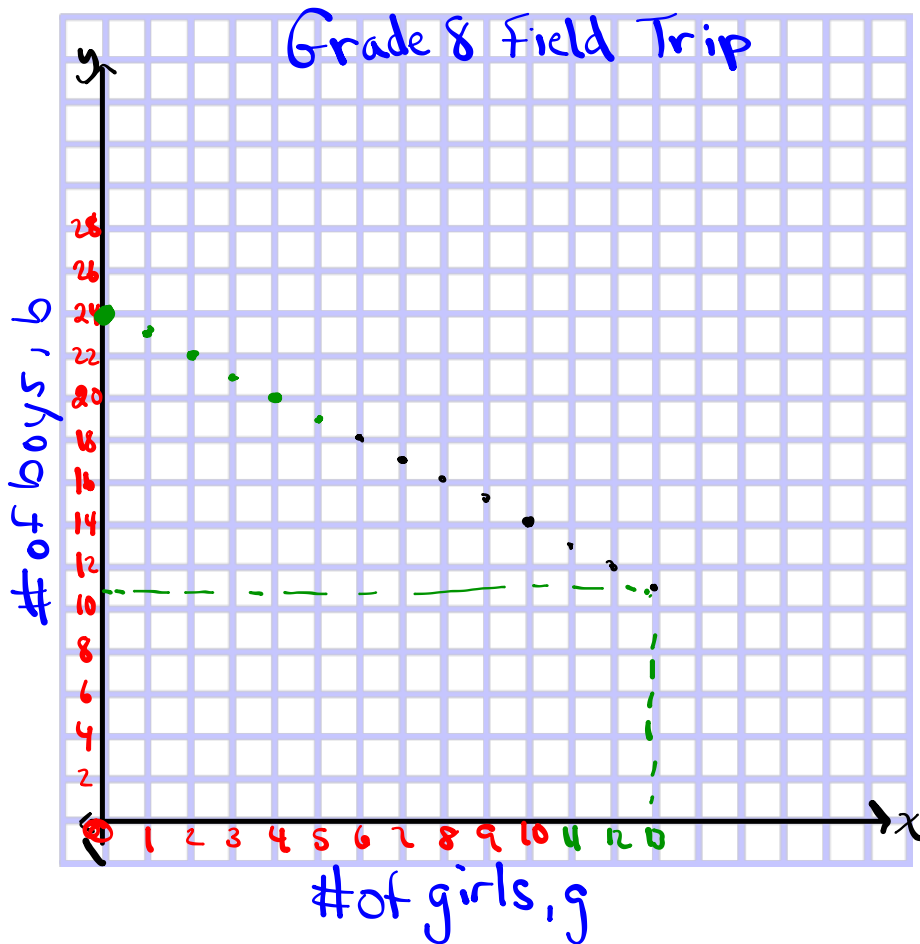
$g = 0$
 $b = 24 - (g)$
 $= 24 - (0)$
 $= 24$

$g = 1$
 $b = 24 - (g)$
 $= 24 - (1)$
 $= 23$

$g = 2$
 $b = 24 - (g)$
 $= 24 - (2)$
 $= 22$

increase by 1 (pointing to g values)
decrease by 1 (pointing to b values)

c) The relation is
 When the number of girls, g , increases by 1, the number of boys decrease by 1.



g	b
0	24
1	23
2	22
3	21
4	20
5	19

Straight line of dots

→ Can't connect dots since I cannot have half a girl.

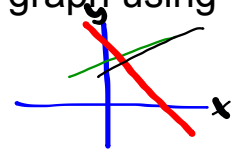
Class/Homework

Section 6.6, 6.7 Test Friday Oct 28

Page 363 -365

4(Hint: make a table of values using the graph then describe) ,

#6(a, b, c, d) (Show work but then place all lines on same graph using different colors for different lines),



#7(Make a table),

#9,

#10,

#11



#13

NEED MORE

pg. 373 # 18, 19, 20

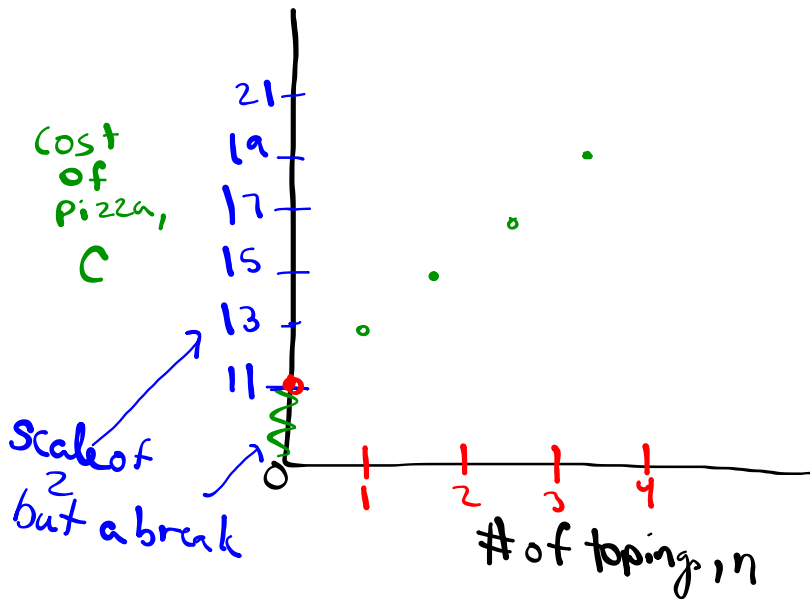
(#15, #21, #22)

$$C = 11 + 2n$$

n	0	1	2	3	4
C	11	13	15	17	19

Annotations: An arrow from n=0 to n=1 is labeled "increase by 1". An arrow from C=11 to C=13 is labeled "increase by 2".

b) A # of topping increase by 2, the cost increases by 2.



4) a)

increase
by 1

x	y
0	-1
1	3
2	7
3	11
4	15
5	19

Read off graph

increase
by 4As x increases by 1
the y value increase
by 4.

Class/Homework

pg. 364 # 10, #11, #12, #13

pg. 373 # 18, 19, 20

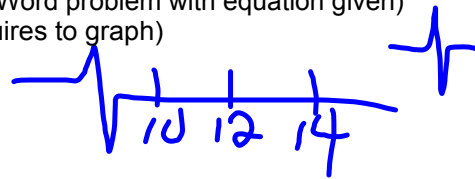
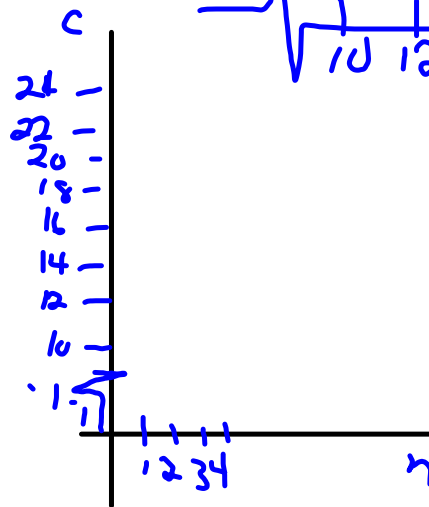
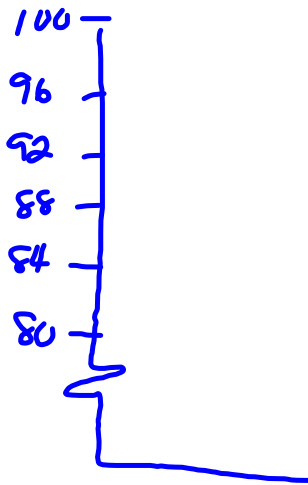
NEED more (#15, #21, #22)

Test Tomorrow on Section 6.6 & 6.7 ???

2 MC

1 Short Response (Word problem with equation given)

Part a to f (Requires to graph)



pg 363

1. No you can not have negatives since you can not have a negative number of girls and boys.
2. You can only have whole number values, so you don't connect the points.
3. The banding would be on opposite sides, and the graph would be the same.

4a) $y = 4x - 1$

Input	Output
x	y
0	-1
1	3
2	7
3	11
4	15

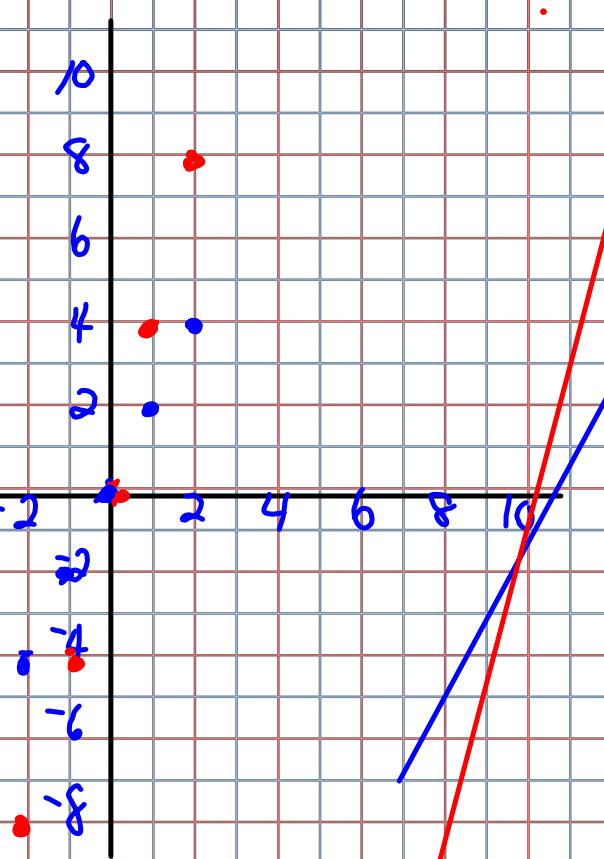
x goes up by 1,
 y goes up by 4.

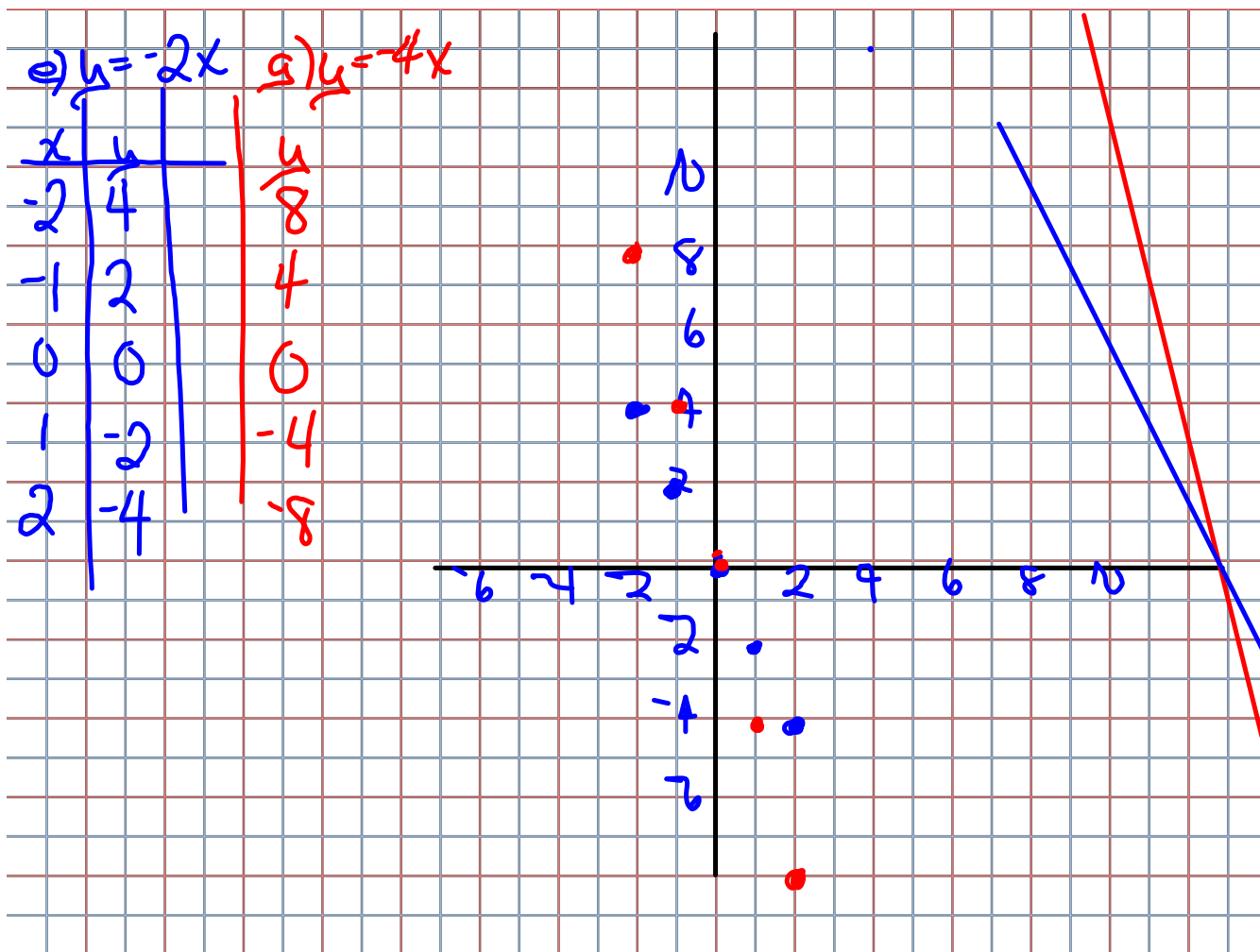
b) $y = -3x + 9$

Input	Output
x	y
0	9
1	6
2	3
3	0

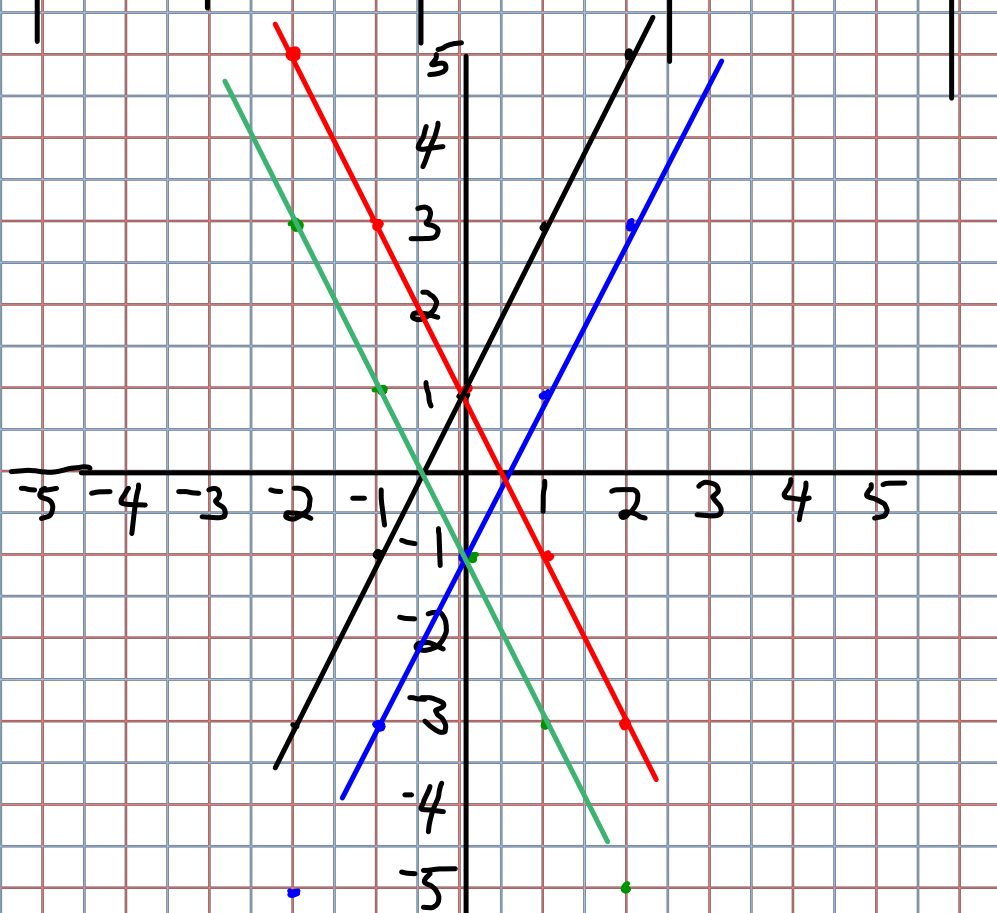
x goes up by 1
 y goes down by 3
 (or up -3)

5a) $y = 2x$		b) $y = 4x$	
x	y	x	y
-2	-4	-8	-32
-1	-2	-4	-16
0	0	0	0
1	2	4	16
2	4	8	32





6	x	a) $2x+1$	b) $2x-1$	c) $-2x+1$	d) $-2x-1$
	-2	-3	-5	5	3
	-1	-1	-3	3	1
	0	1	-1	1	-1
	1	3	1	-1	-3
	2	5	3	-3	-5



$$7 \quad y = 8x + 3$$

$$(2, \quad)$$

$$\begin{aligned} y &= 8 \times 2 + 3 \\ &= 16 + 3 \\ &= 19 \end{aligned}$$

$$(5, \quad)$$

$$\begin{aligned} y &= 8 \times 5 + 3 \\ &= 40 + 3 \\ &= 43 \end{aligned}$$

$$8. \quad y = -6x - 5$$

$$(-3, \quad)$$

$$\begin{aligned} y &= -6 \times -3 - 5 \\ &= 18 - 5 \\ &= 13 \end{aligned}$$

$$(2, \quad)$$

$$\begin{aligned} y &= -6x - 5 \\ &= -6 \times 2 - 5 \\ &= -12 - 5 \\ &= -17 \end{aligned}$$

$$(\quad, 27)$$

$$(3, 27)$$

from the graph

up
each
time

Input	Output
x	$8x + 3$
0	3
1	11
2	19
3	27
4	35
5	43

add 8
each
time

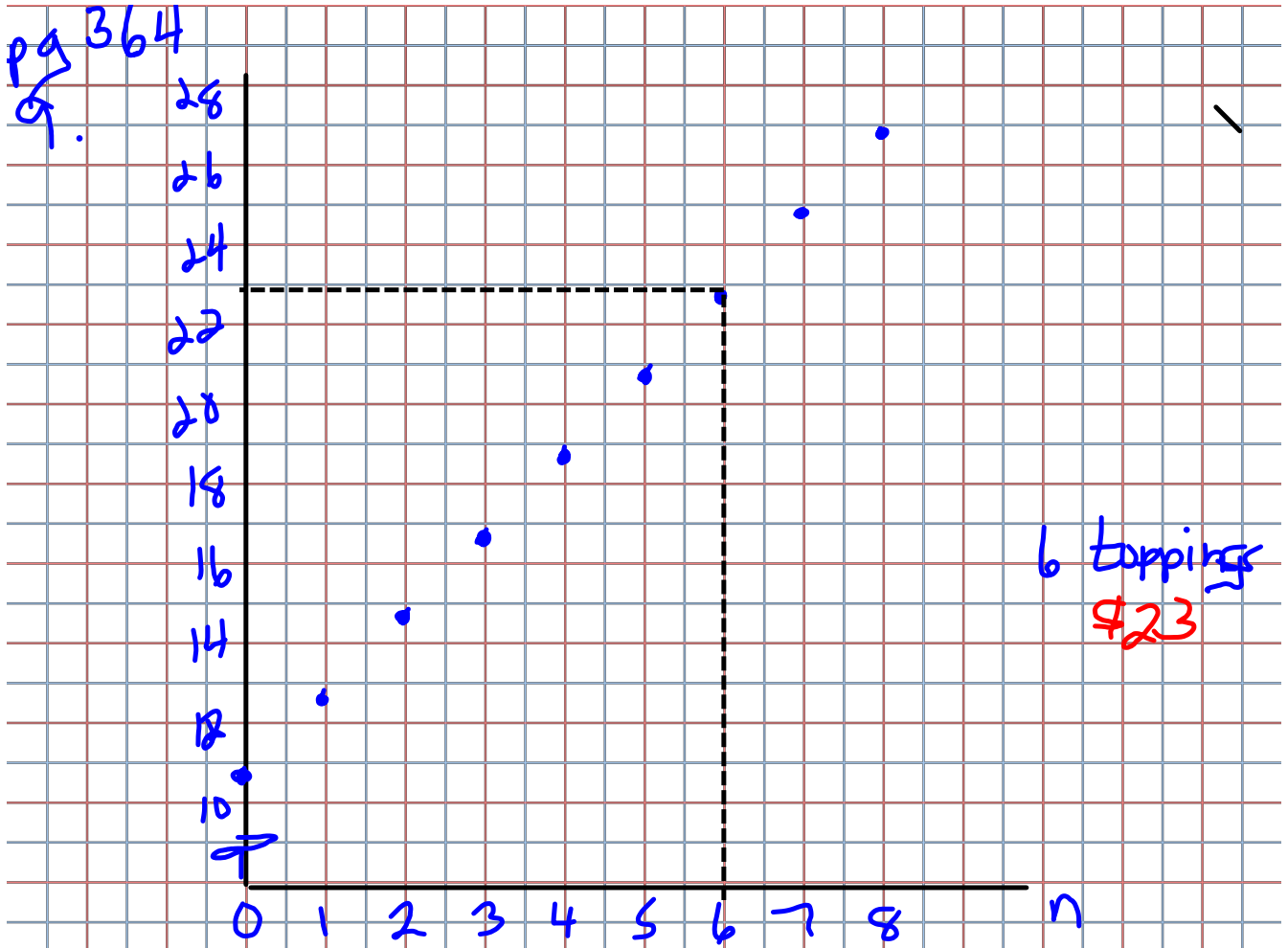
$$(\quad, 7)$$

$x = 2$ (using graph)

$$(\quad, -23)$$

(3, -23) using graph

could have
used a chart



b) as n goes up by 1, cost goes up by 2