

1. Write the equation for the following:

$y = 2x + 2$

2. Is it linear?

yes

3. Graph

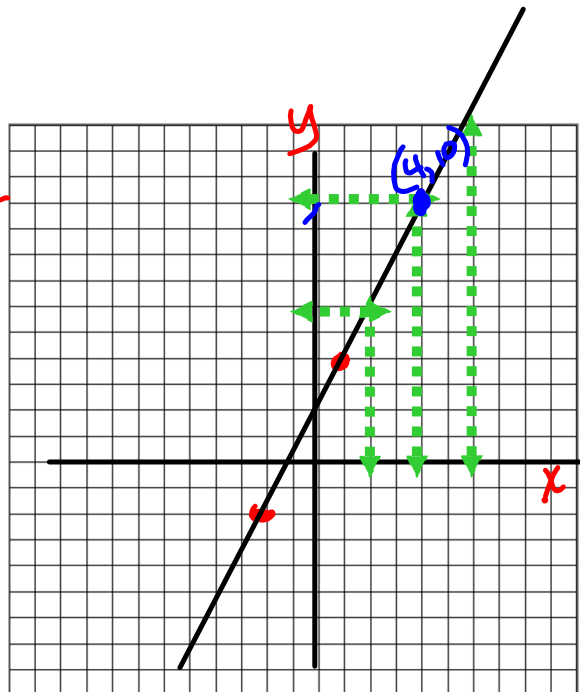
4. Describe the graph.

x	y
-2	-2
-1	0
0	2
1	4

$\rightarrow +2$
 $\rightarrow +2$
 $\rightarrow +2$

As x increases
by 1 y increases
by 2

$x = 2$



$x = 6$

$x = 4$

Graph the equation: $y = -2x + 1$

x	y
0	1
1	-1
2	-3

$x = 0$

$$y = -2x + 1$$

$$= -2(0) + 1$$

$$= 1$$

$x = 1$

$$y = -2x + 1$$

$$= -2(1) + 1$$

$$= -2 + 1$$

$$= -1$$

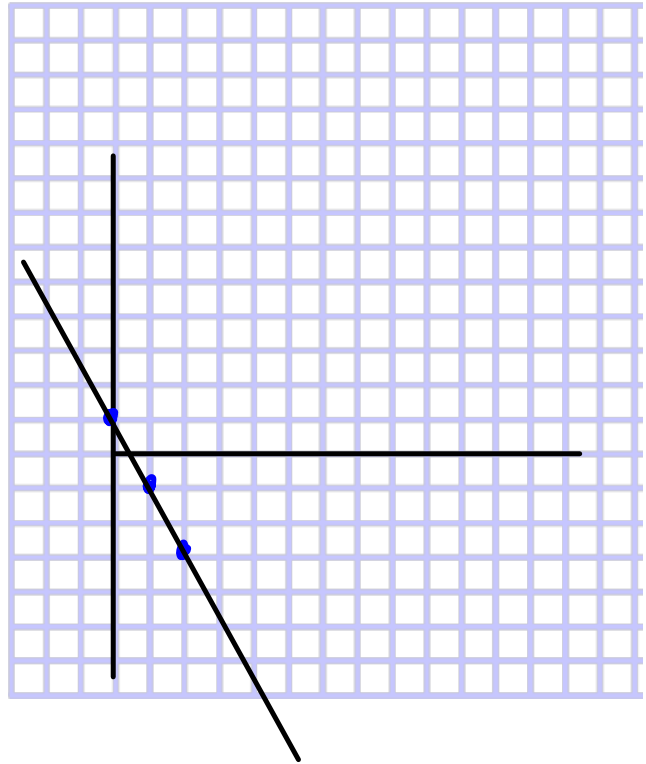
$x = 2$

$$y = -2x + 1$$

$$= -2(2) + 1$$

$$= -4 + 1$$

$$= -3$$



This table shows a linear relationship, find the missing values.

x	y
1	1
2	5
3	9
4	13

Handwritten annotations: The y-values 1, 5, 9, and 13 are circled in red. Brackets between the y-values indicate a constant difference of +4 between consecutive terms.

Discrete : Unconnected Line

There is not an infinite number of values between whole numbers.

[number of nickels, people, shapes etc...]

continuous: Connected Line

There is an infinite number of values between whole numbers.

[money, height, time etc...]



Think about the two situations

Cost of video games

Number of Video games	Cost, C(\$)
1	25
2	50
3	75

$\begin{matrix} > +25 \\ > +25 \end{matrix}$

Can you buy 1.5 video games?

No

So would you connect the dots???

No

Write an equation to solve for Cost

$$C = 25v$$

Babysitting Job

Number of Hours	Earnings, C(\$)
1	10
2	20
3	30

$\begin{matrix} > +10 \\ > +10 \end{matrix}$

Can you work 1.5 hours?

yes

So would you connect the dots???

yes

Write the equation for Earnings

$$C = 10h$$

A photographer charges a sitting fee of \$10 and \$5 for every photograph ordered.

$C = \text{cost}$
 $p = \text{photographs}$



A. Write the equation.

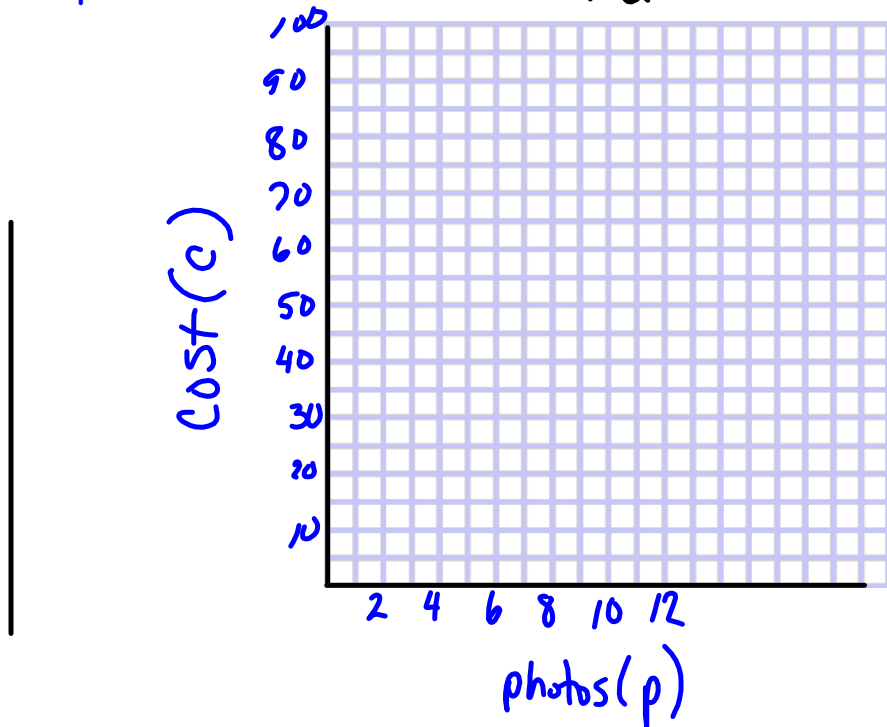
$$C = 10 + 5p$$

$$C = 5p + 10$$

B. Graph [we need a table of values]

pictures (p)	cost (c)
0	10
1	15
2	20

C. Use your graph to predict...



Class/Homework

Page 171

#8 Copy table a, b, c, d copy

#9 Copy tables

#10 Create table values and use the values given!!!

Graph a, b, c