

Warm Up

9/21

What is the slope of the line that connects the points:

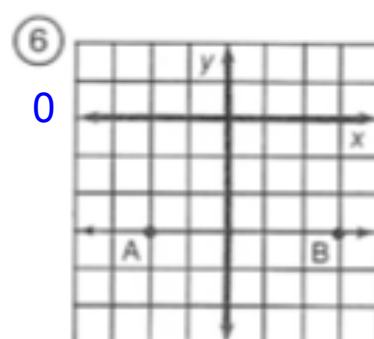
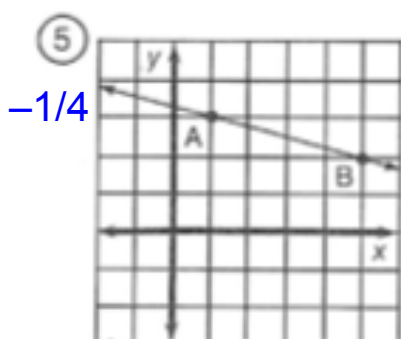
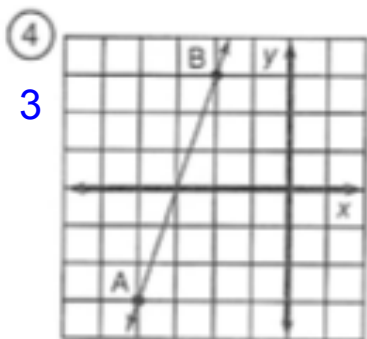
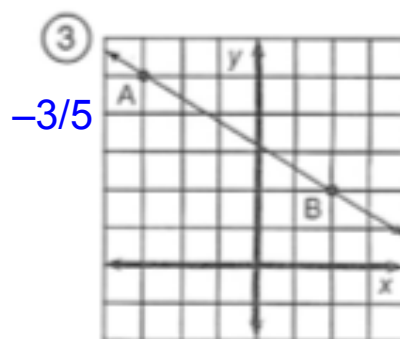
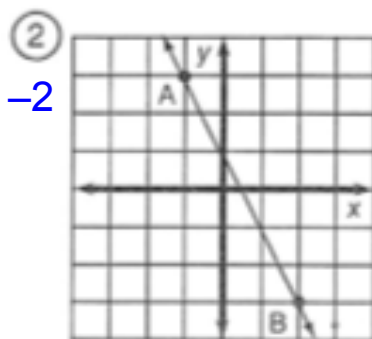
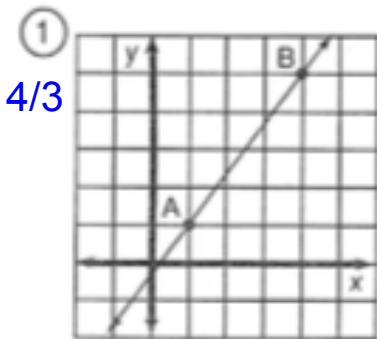
$x \quad y$

$(7, 5)$ and $(10, 3)$

$(10, 3)$

$\frac{\Delta y}{\Delta x} = \frac{-2}{3}$

Homework Questions?



⑦ $(2, 1); (5, 3) \quad 2/3$

⑪ $(9, 2); (3, -1) \quad 1/2$

⑮ $(-4, -8); (-2, 0) \quad 4$

⑧ $(8, 3); (2, 5) \quad -1/3$

⑫ $(-5, 8); (-4, 2) \quad 6$

⑯ $(-3, -3); (0, 0) \quad 1$

⑨ $(1, -4); (6, -2) \quad 2/5$

⑬ $(0, -1); (4, -7) \quad -3/2$

⑰ $(2, 5); (9, 1) \quad 4/7$

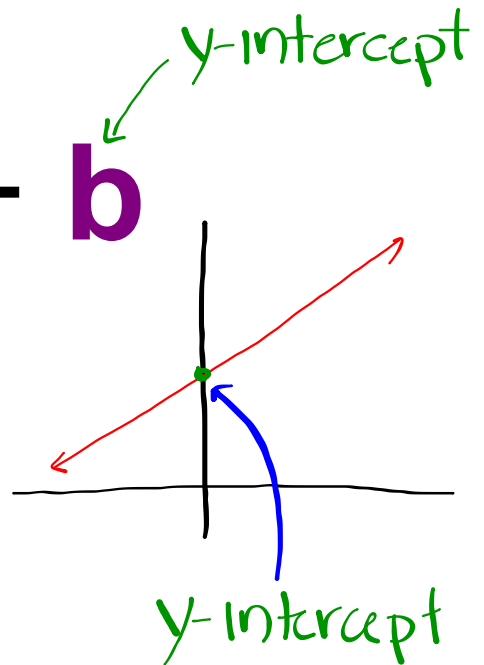
⑩ $(-3, 1); (-7, 4) \quad -3/4$

⑭ $(1, -1); (-2, -6) \quad 5/3$

⑱ $(0, 0); (-2, 7) \quad -7/2$

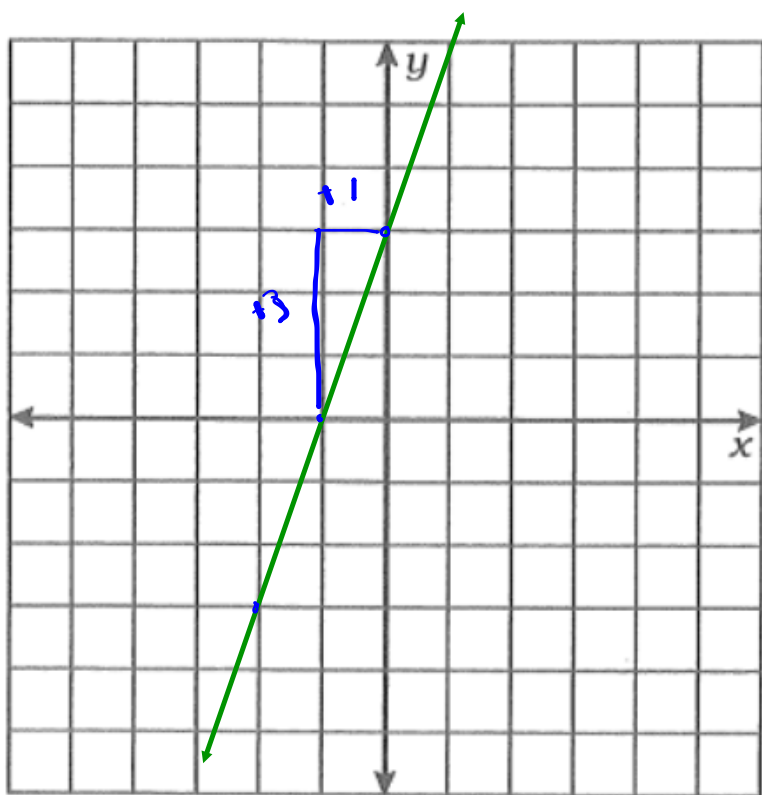
$$y = mx + b$$

slope = $\frac{\Delta y}{\Delta x}$



The value of y
when $x=0$

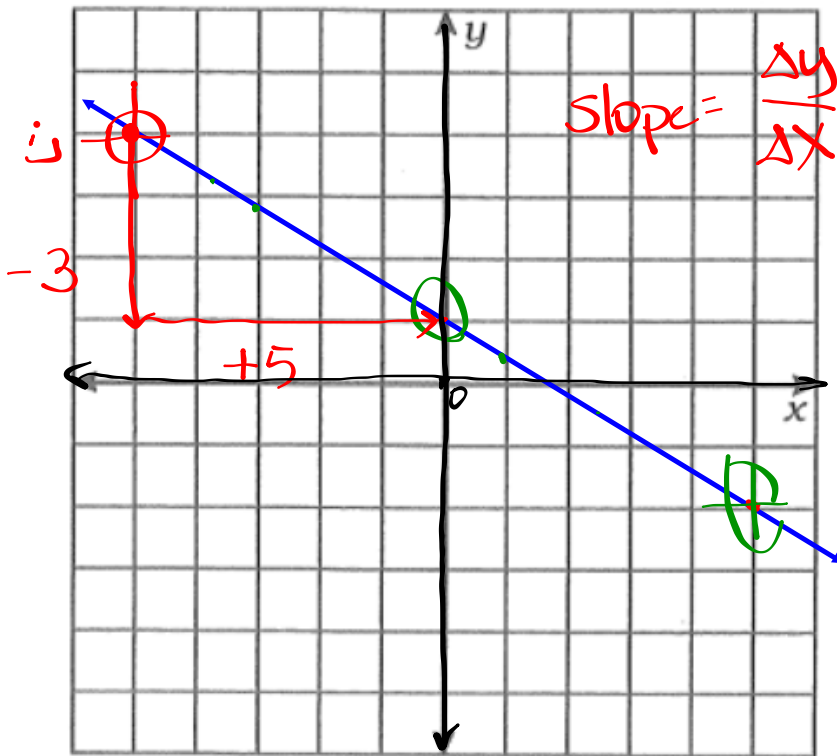
$$y = mx + b$$



$$\frac{\Delta y}{\Delta x} = \frac{3}{1} = 3$$

$$y = 3x + 3$$

$$y = mx + b$$



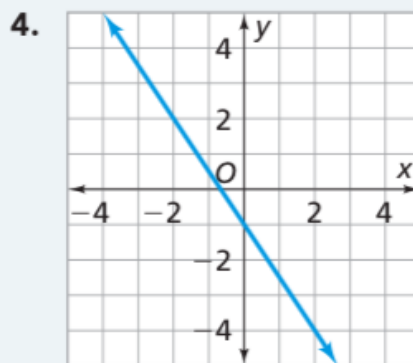
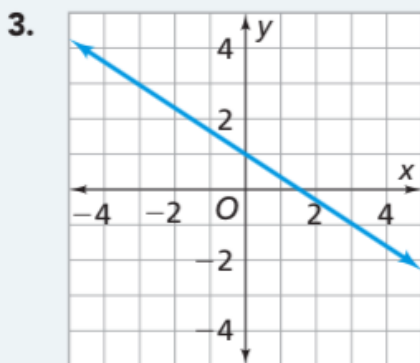
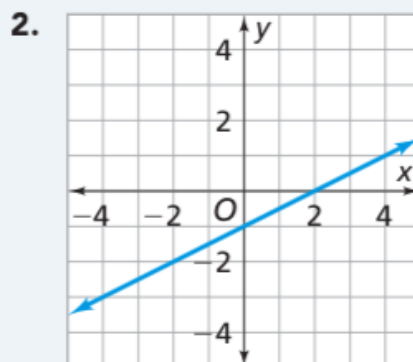
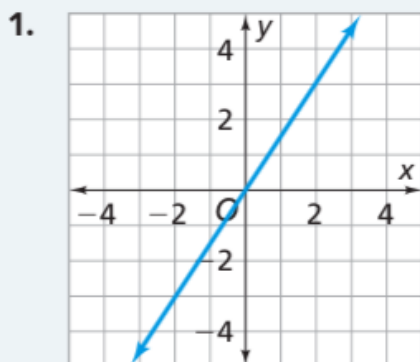
$$\text{slope} = \frac{\Delta y}{\Delta x} = \frac{-3}{5}$$

$$y = -\frac{3}{5}x + 1$$

Problem 2.2

Use the data given in each question to find the equation of the linear function relating y and x .

- A** For the functions with the graphs below, find the slope and y -intercept. Then write the equations for the lines in the form $y = mx + b$.



- B** 1. Find equations for the linear functions that give these tables. Write them in the form $y = mx + b$.

a.

x	-2	-1	0	1	2
y	-1	1	3	5	7

$\begin{matrix} +1 & +1 & +1 & +1 \\ \wedge & \wedge & \wedge & \wedge \\ +2 & +2 & +2 & +2 \end{matrix}$

b.

x	-6	-2	2	6	10
y	-4	-2	0	2	4

2. For each table, find the unit rate of change of y compared to x .
3. Does the line represented by this table have a slope that is greater than or less than the equations you found in part 1(a) and part 1(b)?

x	-1	0	1	2	3
y	4	1	-2	-5	-8

Homework

Finish classwork