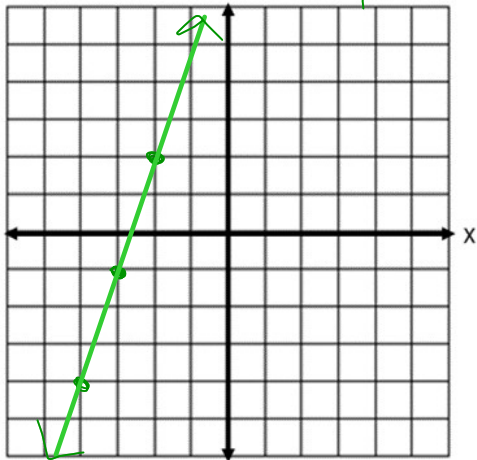


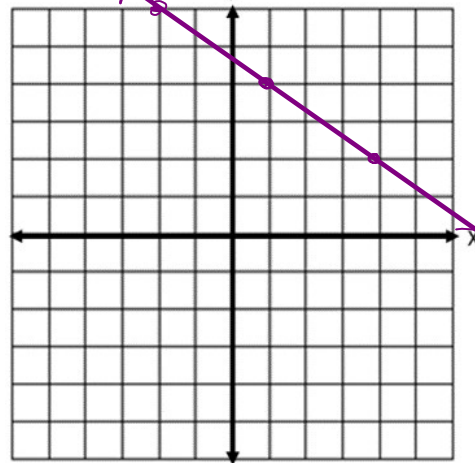
Graphing with a Point and Slope

Draw a line through:

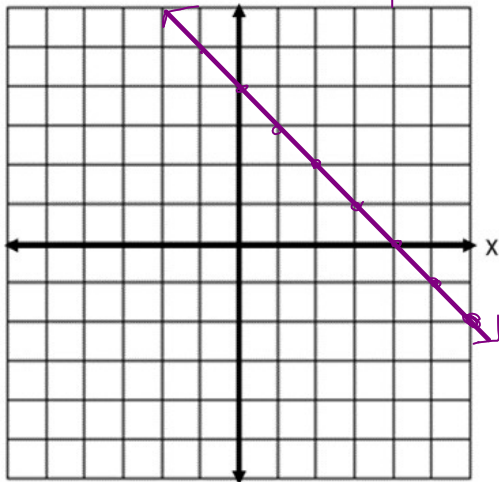
a) $(-2, 2)$ with slope of 3



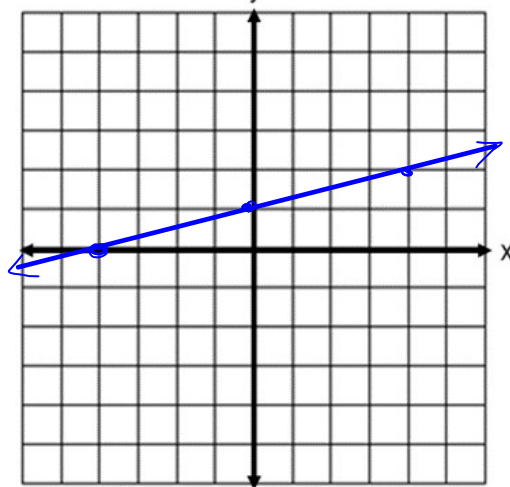
b) $(1, 4)$ with slope of $-\frac{2}{3}$



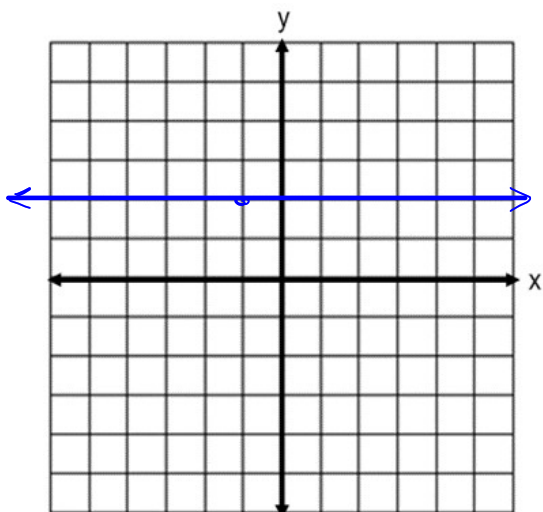
c) $(6, -2)$ with slope of -1



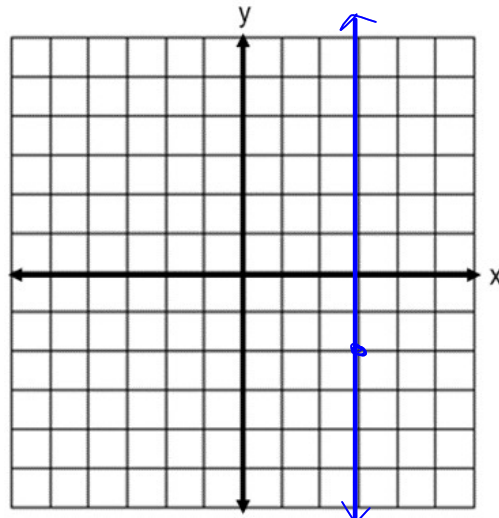
d) $(-4, 0)$ with slope of $\frac{1}{4}$



e) $(-1, 2)$ with slope of 0



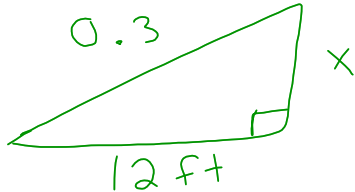
f) $(3, -2)$ with slope of undefined



Slope Word Problems

$$\text{slope} = \frac{\text{rise}}{\text{run}}$$

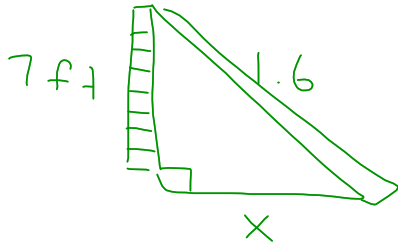
Ex) A ramp runs horizontally 12 ft. If it has a slope of 0.3 how high will one end be?



$$(12) 0.3 = \frac{x}{12} (12)$$
$$3.6 = x$$

The height is 3.6 ft.

Ex) The slope of a playground slide is 1.6. If the ladder is vertical and is 7 ft tall, how far horizontally will the slide travel?



$$(x) 1.6 = \frac{7}{x} (x)$$
$$\frac{1.6x}{1.6} = \frac{7}{1.6}$$
$$x = 4.4$$

The slide travels 4.4 ft horizontally.

Distance + Midpoint key (Blue ws)

1. a) $d = \sqrt{34} = 5.83$

b) $d = \sqrt{52} = 7.21$

c) $d = \sqrt{610} = 24.70$

2. a) $d = \sqrt{52} = 7.21$

b) $r = \frac{\sqrt{52}}{2} = 3.61$

3. a) $(5, 3)$

b) $(1, 7)$

3. c) $(9, \frac{3}{2})$ or $(9, 1.5)$

4. Centre $(1, 0)$

5. a) $(-17, -29)$

b) $(8, -3)$

c) $(-25, -6)$