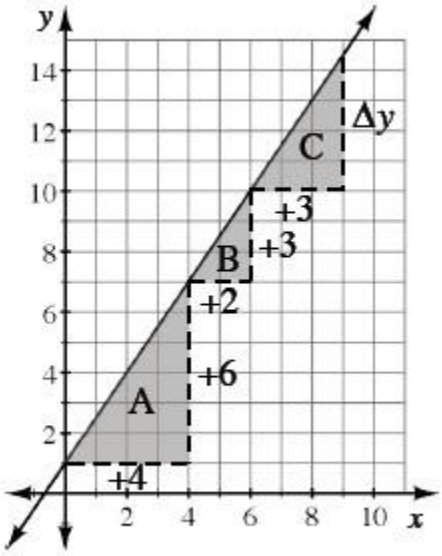
SLOPE
Comparing Δx and Δy

FIRST!!! Find the line graphed at right with slope triangles A, B, and C

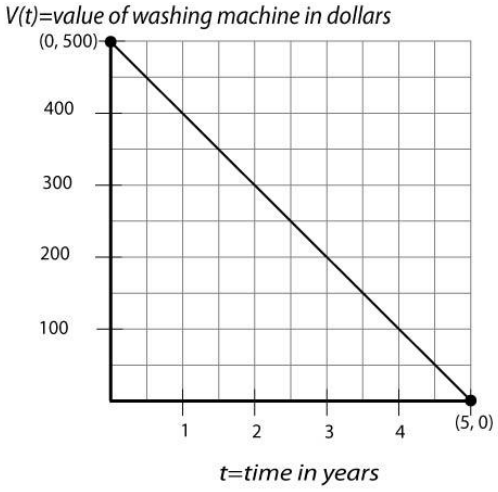
a. Find the slope using slope triangles A and B. What do you notice?



b. What is the vertical distance (Δy) of slope triangle C? Explain your reasoning.

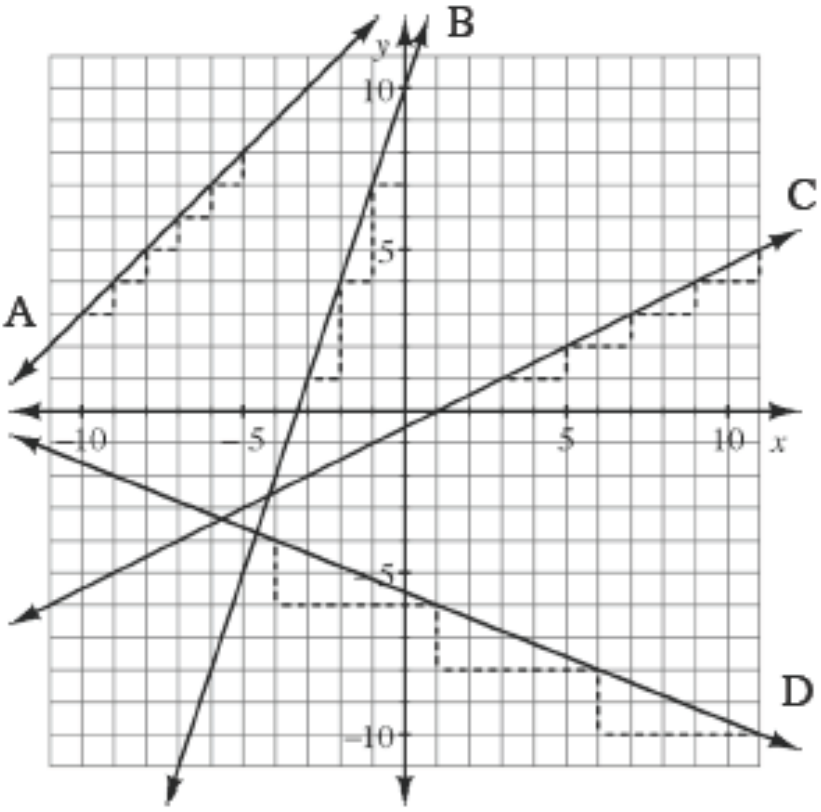
Next!!!!

Draw a slope triangle on the line with a horizontal distance (Δx) of 1 unit. Find the vertical distance (Δy) .



GOOD GRAPH of V(t) = -100t + 500

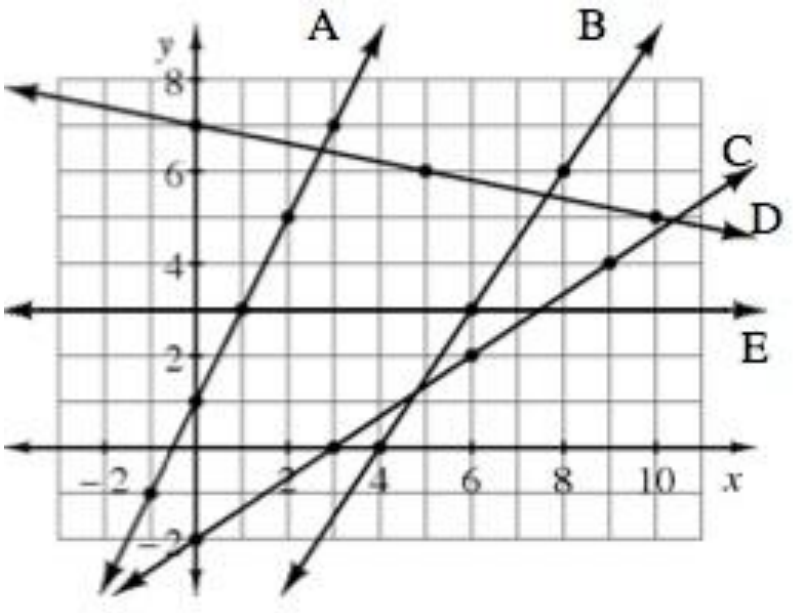
TOGETHER AS A CLASS



YOUR TURN!!

Answer the following questions, according to the graph shown at right

a. Which is the steepest line? Which is steeper, line B or line C?



b. Draw slope triangles for lines A, B, C, D, and E using the highlighted points on each line. Label Δx and Δy for each.

c. Match each line with its slope using the list below. Note: There are more slopes than lines.

$m = 6$ $m = 2$ $m = -\frac{1}{5}$ $m = \frac{3}{2}$

$m = 0$ $m = -\frac{2}{3}$ $m = -5$ $m = \frac{2}{3}$

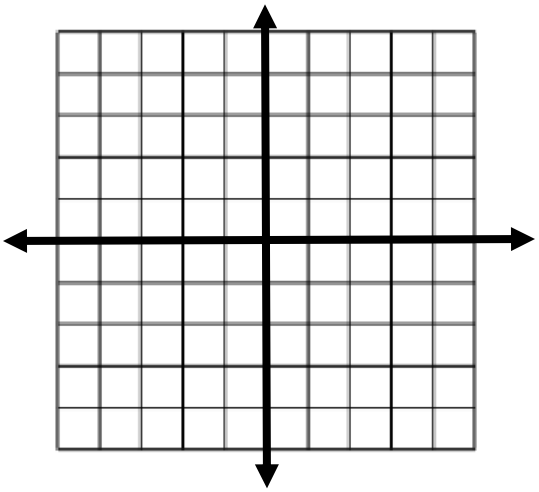
DO YOU KNOW?

a. Viewed left to right, in what direction would a line with slope $-\frac{3}{5}$ point? How do you know?

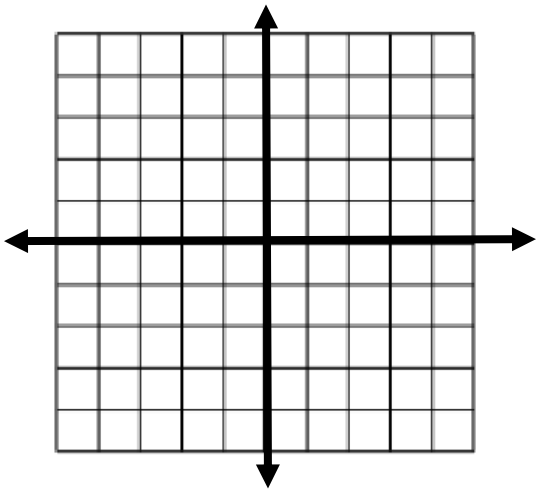
b. Viewed left to right, in what direction would a line with slope $-\frac{5}{3}$ point? How do you know? How would it be different from the line in part with slope $-\frac{3}{5}$

2-27. Graph a line to match each description below.

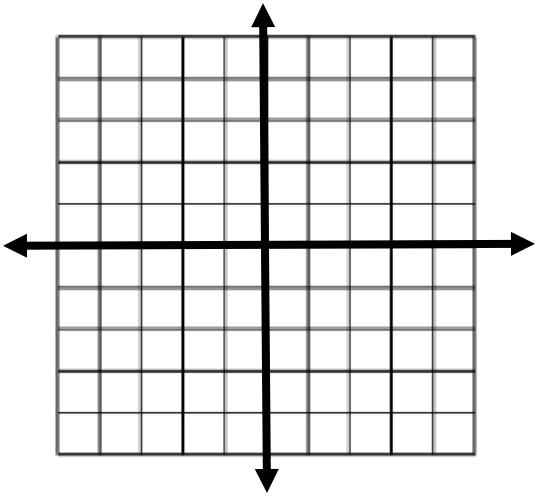
a. $y = \frac{3}{5}x - 1$



b. A line with $\Delta x = 4$ and $\Delta y = -6$.



c. $f(x) = x - 7$



d. A line that has $\Delta y = 3$ and $\Delta x = 0$.