

Name: \_\_\_\_\_

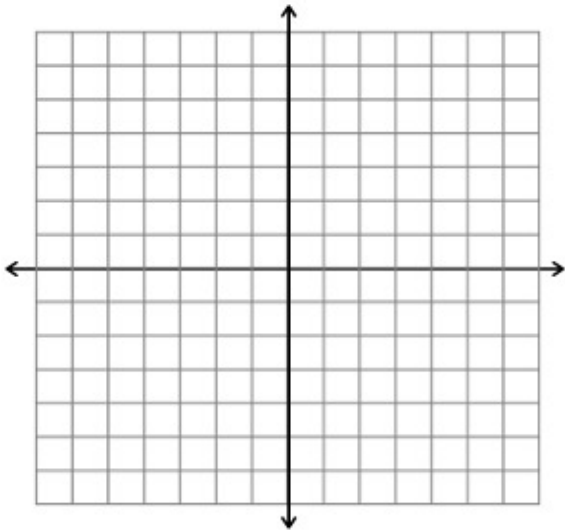
Period: \_\_\_\_\_

Unit 2 Lesson 5: Writing equations of lines

Do Now: Find the slope of a line that passes through the points (2, 2) and (12, 10).

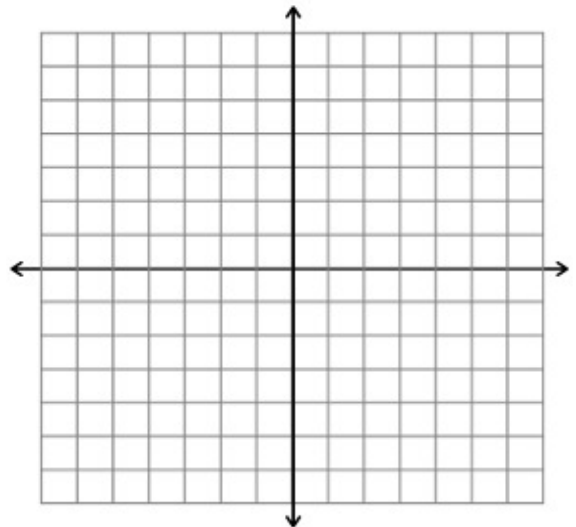
### Slope-intercept Form

$$m = \frac{2}{3} \quad b = 1$$

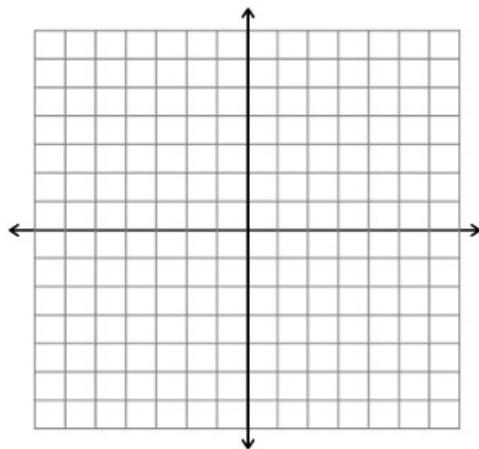


### Point Slope Form

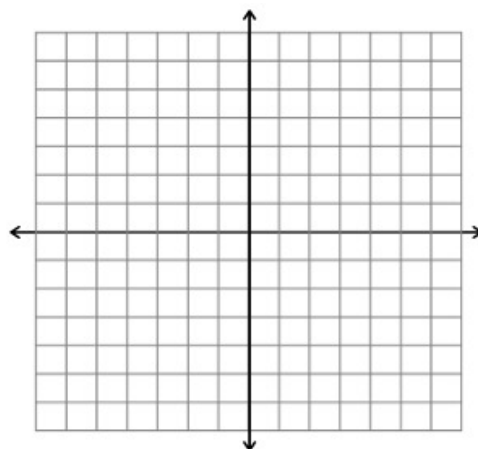
$$m = -2 \quad \text{point on the line: } (-3, 3)$$



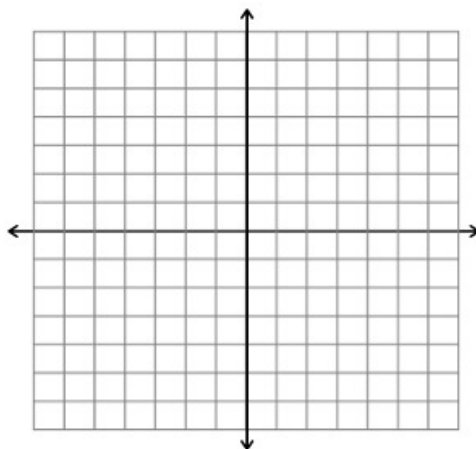
1. Graph and write the equation of a line that passes through the points  $(5, 2)$  and has a slope of 1.



2. Graph and write the equation of a line with a slope of 2 that passes through the point  $(3, 3)$ .



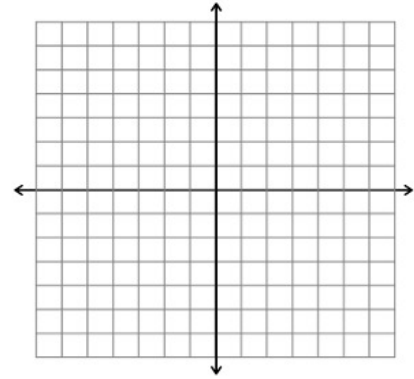
3. Graph and write the equation of a line that passes through the points  $(1,1)$  and  $(4, 2)$ .



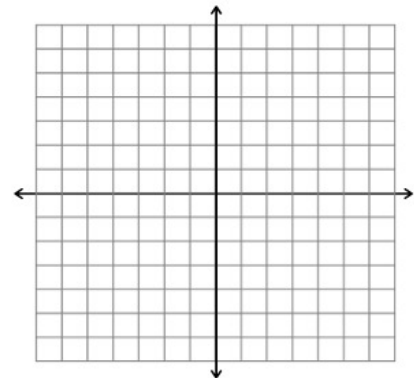
What is different about this question?

Lesson 5: Practice

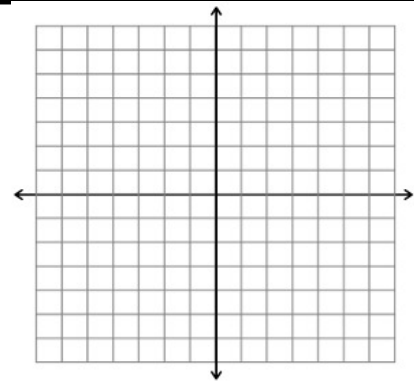
4. Graph and write the equation of a line with a slope of  $-4$  that passes through the point  $(1, 4)$



5. Graph and write the equation of a line with a slope of  $4$  that passes through the origin.



6. Graph and write the equation of the vertical and horizontal line that passes through the point  $(2, 4)$ .



7. Graph and write the equation of a line that passes through the points  $(1, 1)$  and  $(3, 3)$ .

