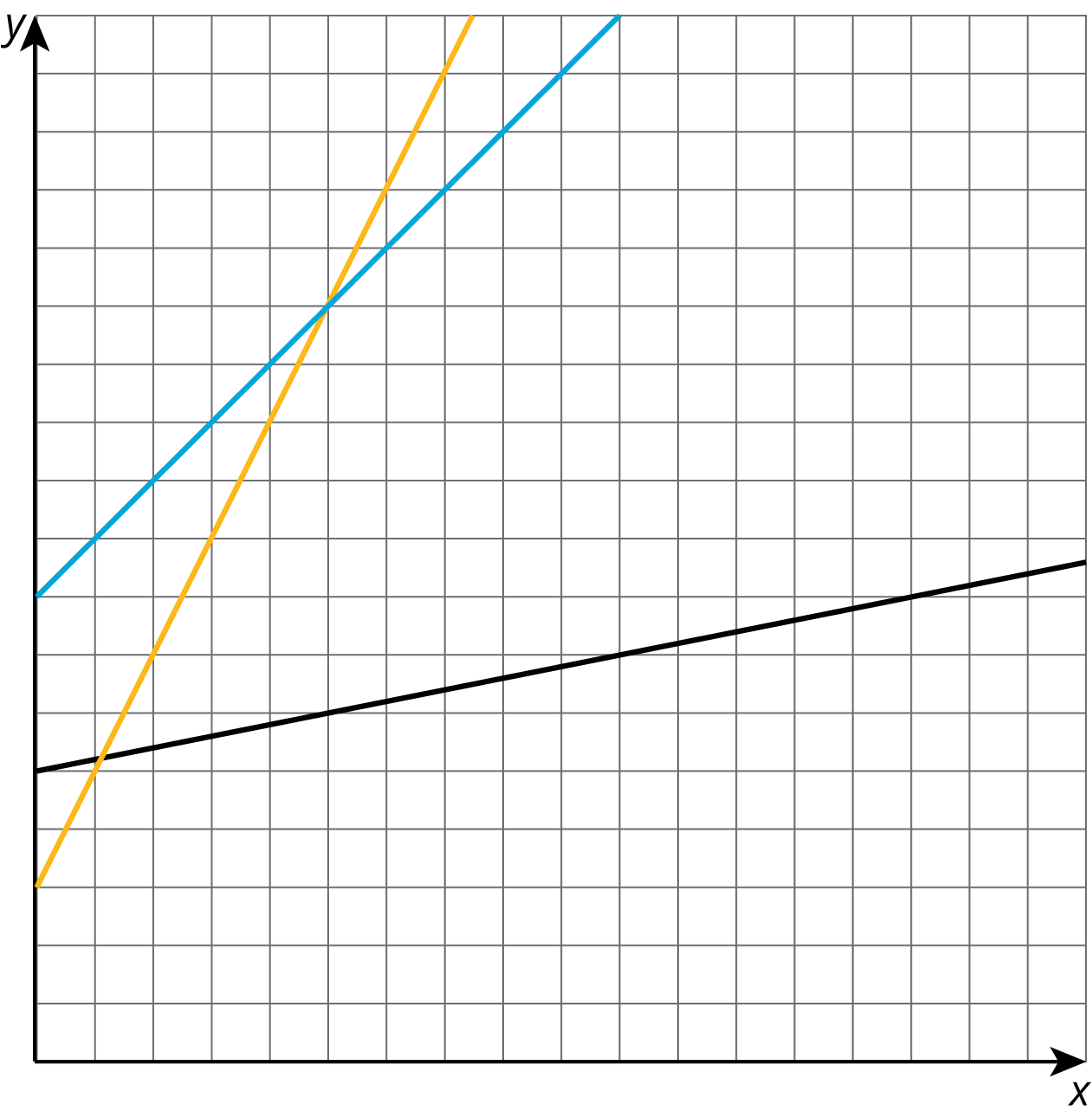
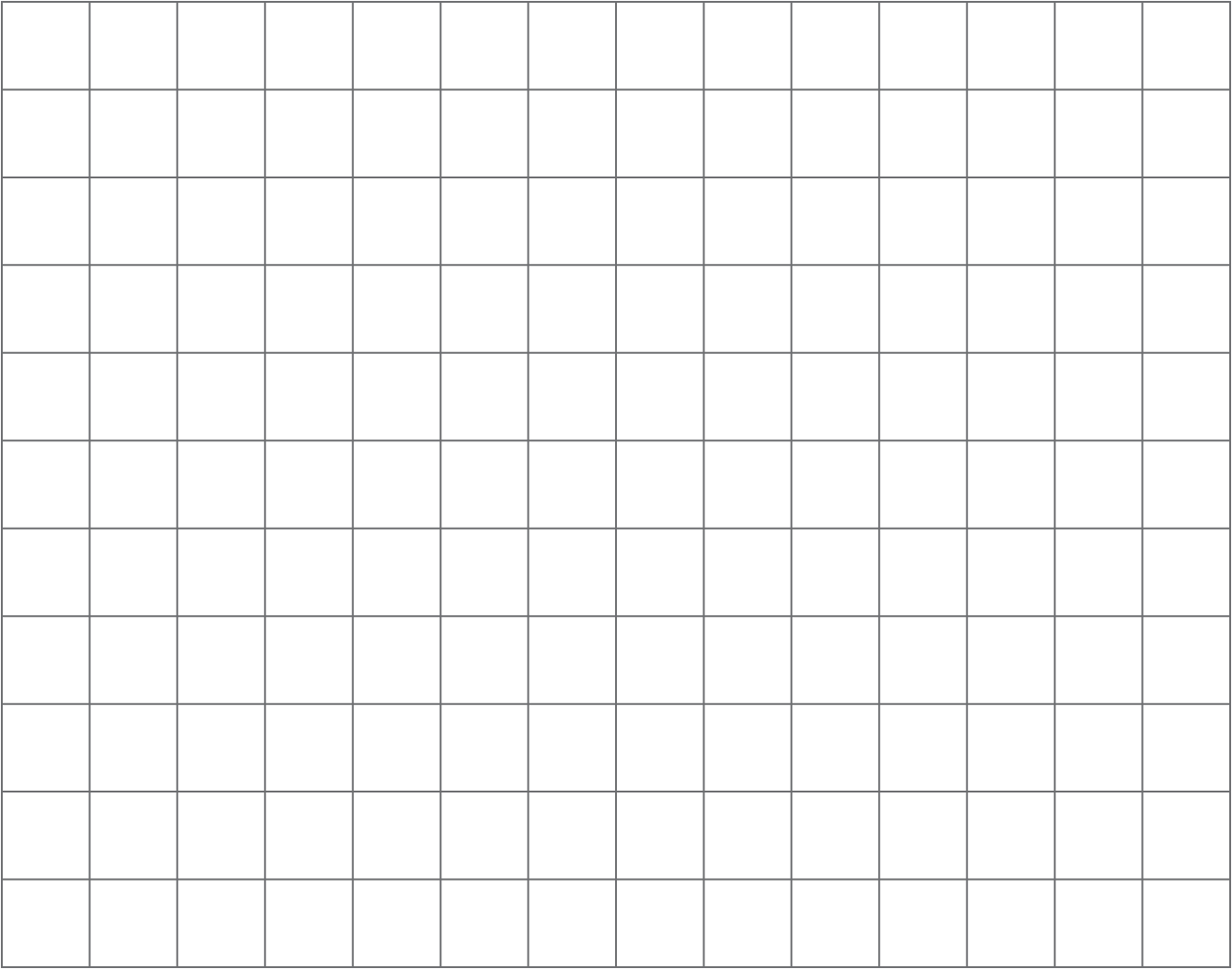
### Lesson 15 Practice Problems

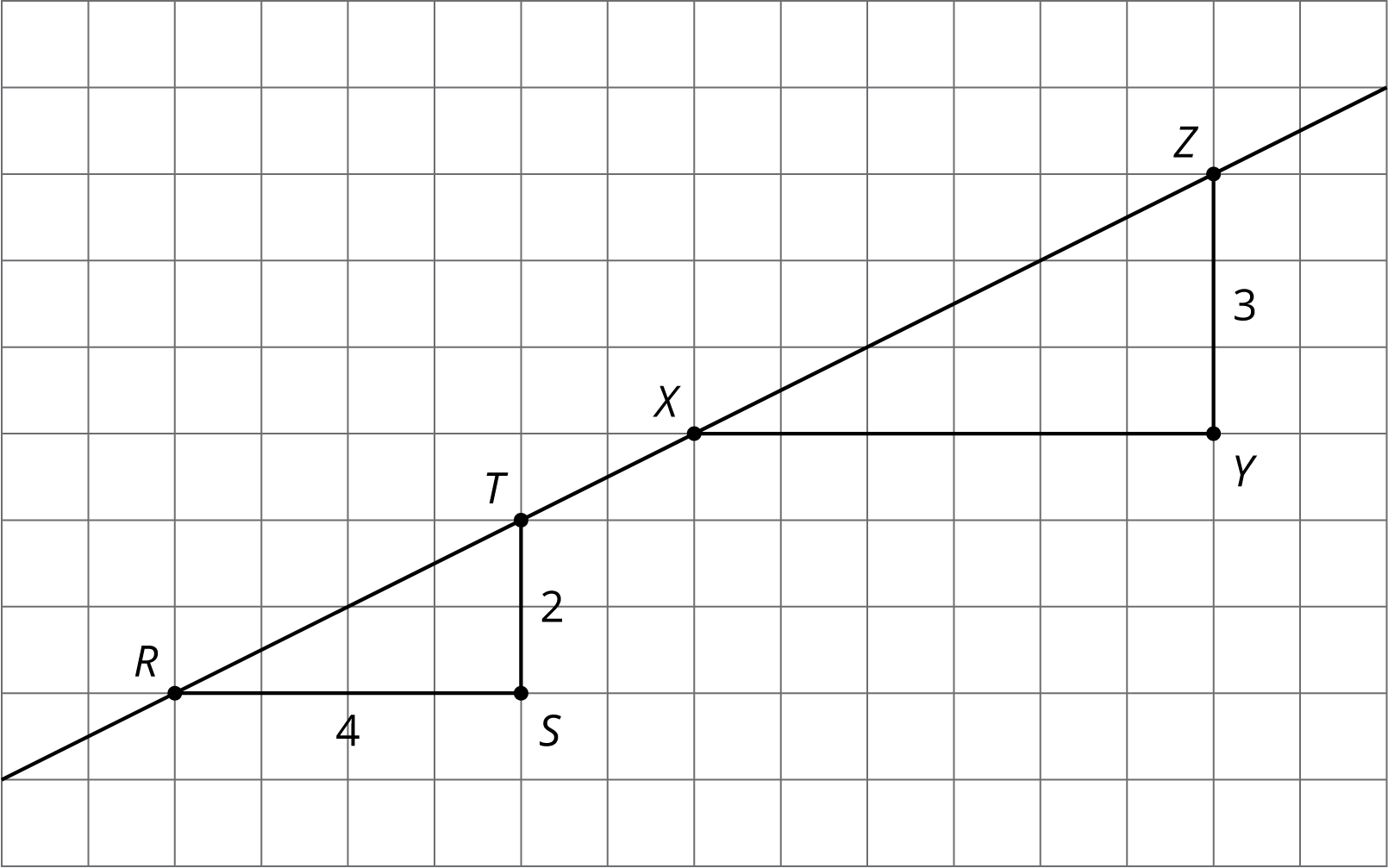
1. Of the three lines in the graph, one has slope 1, one has slope 2, and one has slope  Label each line with its slope.

* 

1. Draw three lines with slope 2, and three lines with slope . What do you notice?

* 

1. The figure shows two right triangles, each with its longest side on the same line.

* 
  1. Explain how you know the two triangles are similar.
  2. How long is ?
  3. For each triangle, calculate (vertical side) (horizontal side).
  4. What is the slope of the line? Explain how you know.

1. Triangle has side lengths 3, 4, and 5. Triangle has side lengths 6, 7, and 8.
   1. Explain how you know that Triangle is *not* similar to Triangle .
   2. Give possible side lengths for Triangle so that it is similar to Triangle .

* (From Unit 2, Lesson 14.)

1. Select **all**the ratios that are equivalent to the ratio .

* (From Unit 2, Lesson 3.)

1. Triangle is a scaled copy of triangle . Side measures 12 cm and is the longest side of . Side measures 8 cm and is the longest side of .
   1. Triangle is a scaled copy of triangle with what scale factor?
   2. Triangle is a scaled copy of triangle with what scale factor?

* (From Unit 2, Lesson 8.)



© CC BY Open Up Resources. Adaptations CC BY IM.