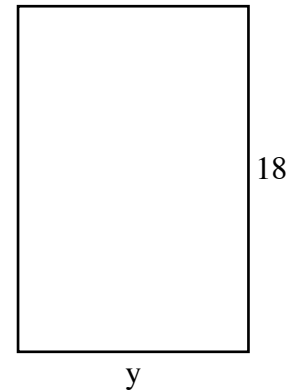
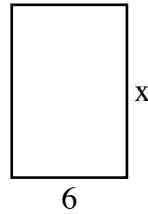


MathFLIX CHALLENGE

Proportions: Similar Figures

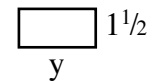
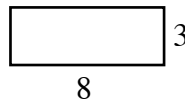
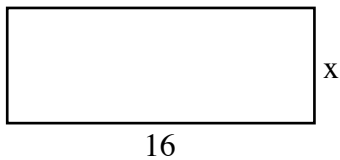
If figures are similar, it means they have the same shape, but are a different size. This means that the measure of their lengths and widths will be in proportion to each other. To determine the value of x and y in the two similar rectangles. Study the figures below to determine if they are similar figures.



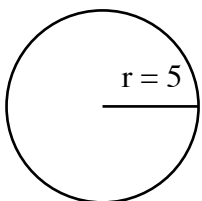
$$\begin{aligned}x/6 &= 3/2 \\2x &= 18 \\x &= _ \end{aligned}$$

$$\begin{aligned}18/y &= 3/2 \\3y &= _ \\y &= _ \end{aligned}$$

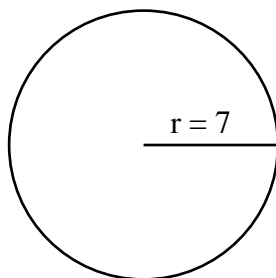
Now try to identify x and y in this set of similar figures on your own.



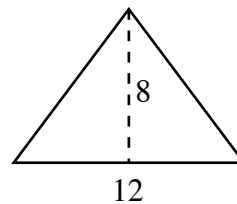
Finally use what you have learned about proportion and similar figures to identify the missing value in the figures below. Assume all figures are similar. Hint: Circles, squares and equilateral triangles are always similar.



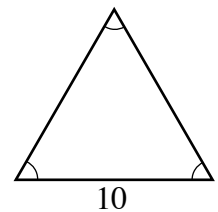
circumference = 10π



circumference = _____



perimeter = _____



perimeter = _____