 **5-7.** You now have multiple trig tools to find missing side lengths of triangles. For the triangle at right, find the values of *x* and *y*. Your Triangle Toolkit might help. Which tools did you use?

 **5-8.** Lori has written the conjectures below. For each one, decide if it is true or not. If you believe it is not true, find a **counterexample** (an example that proves that the statement is false).

1. If a shape has four equal sides, it cannot be a parallelogram.
2. If tan *θ* is more than 1, then *θ* must be more than 45°.
3. If two angles formed when two lines are cut by a transversal are corresponding, then the angles are congruent.

 **5-10.** Copy the trapezoid at right on your paper. Then find its area and perimeter. Keep your work organized so that you can later explain how you solved it. (Note: The diagram is not drawn to scale.)

 **5-11.** Solve each of the equations below for the given variable. Be sure to check your answers.

1. 4(2*x* + 5) −11 = 4*x* − 3
2. http://textbooks.cpm.org/images/gc/chap05/5-11b.gif
3. omitted
4. http://textbooks.cpm.org/images/gc/chap05/5-11d.gif