

The Right Triangle

1. What do the interior (inside) angles of a triangle add up to?

2. What do the non-right angles of a right triangle add up to?

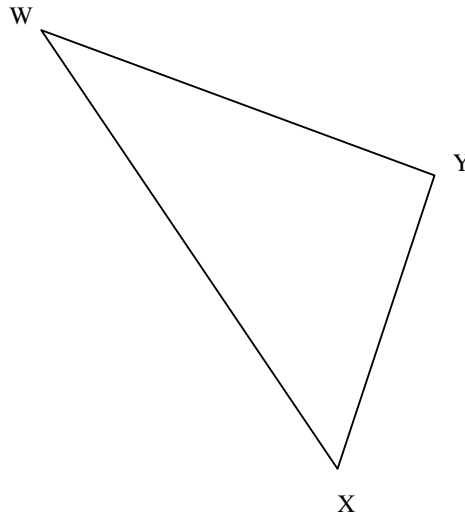
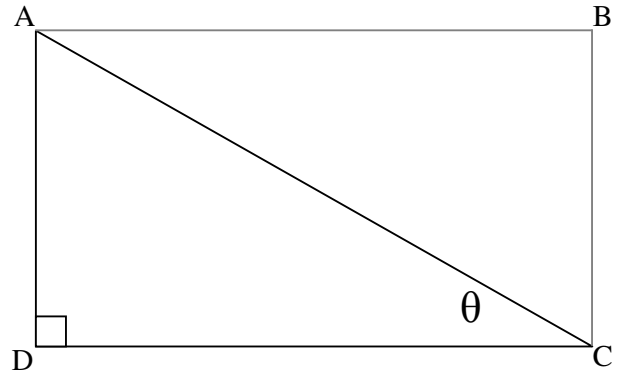
3. On the triangle ACD, label the hypotenuse with an 'H', the side opposite the angle θ with an 'O', and the side adjacent to θ with an 'A'.

4. **Using the label names from the last question,** write down Pythagoras' theorem.

5. What is the area of the rectangle ABCD (using label names from Question 3).

6. From the last question, what is the area of triangle ACD?

7. a) Make two right triangles from the scalene triangle PQR below.
b) Show the right angles using the usual symbols.
c) Label the two hypotenuses.



The Right Triangle – Answer Key

1. What do the interior (inside) angles of a triangle add up to?
 180°

2. What do the non-right angles of a right triangle add up to?
 90°

3. On the triangle ACD, label the hypotenuse with an 'H', the side opposite the angle θ with an 'O', and the side adjacent to θ with an 'A'.

4. Using the label names from the last question, write down Pythagoras' theorem.
 $H^2 = A^2 + O^2$

5. What is the area of the rectangle ABCD (using label names from Question 3). $A \times O$

6. From the last question, what is the area of triangle ACD? $\frac{1}{2} A \times O$

7. a) Make two right triangles from the scalene triangle PQR below.
b) Show the right angles using the usual symbols.
c) Label the two hypotenuses.

