



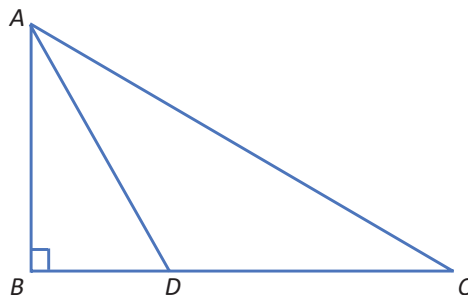
Problem of the Week

Problem C

Triangle Triumph

In the diagram, $\triangle ABC$ is a right triangle with $\angle ABC = 90^\circ$, $BD = 6$ m, $AB = 8$ m, and the area of $\triangle ADC$ is 50% more than the area of $\triangle ABD$.

Determine the perimeter of $\triangle ADC$.



The *Pythagorean Theorem* states, “In a right triangle, the square of the length of hypotenuse (the side opposite the right angle) equals the sum of the squares of the lengths of the other two sides.”

In the following right triangle, $p^2 = r^2 + q^2$.

