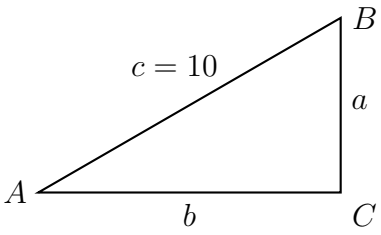
Do Now: Solving situations using algebra

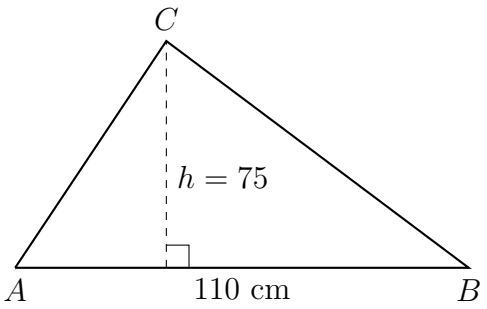
1. $\triangle ABC$ is shown with $m\angle C = 90°$. Given $m\angle A = 30°$, and the lengths of the triangle's sides are a, b, and $c = 10$.



   (a) Solve for a using $\sin 30° = \dfrac{a}{10}$

2. Solve for the length, c, of the hyptenuse of a right triangle where one angle has measure $35°$ and the length of the side opposite it is 11.4. That is, solve for c: $\sin 35° = \dfrac{11.4}{c}$.

3. Find the area of $\triangle ABC$, $Area = \frac{1}{2}bh$. The altitude h of the triangle is 75 centimeters and the base $AB = 110$ cm.



4. The area of a triangular banner is 12710 square centimeters. If the base is 155 cm long, what is the banner's height?