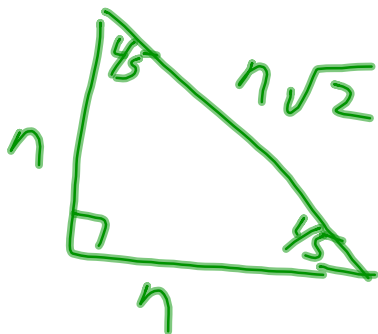


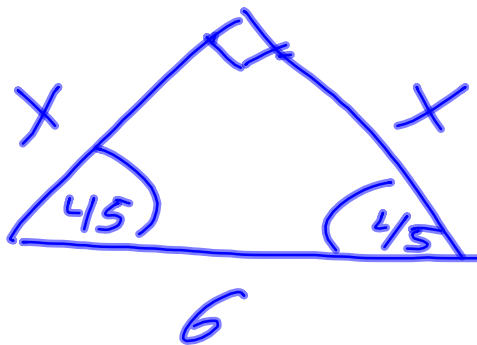
7-3 | Special Right Triangles

$45^\circ - 45^\circ - 90^\circ$ Triangle

hypotenuse = side $\cdot \sqrt{2}$

This is an isosceles triangle





Find x

$$6 = n\sqrt{2}$$

$$\frac{6}{\sqrt{2}} = \frac{n\sqrt{2}}{\sqrt{2}}$$

$$\frac{6 \cdot \sqrt{2}}{\sqrt{2} \cdot \sqrt{2}} = \frac{6\sqrt{2}}{2}$$

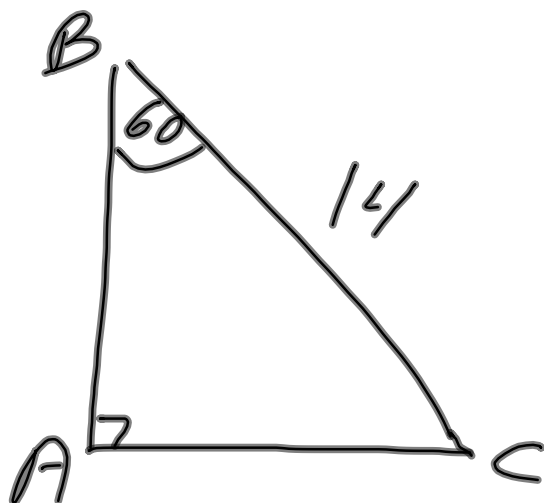
$$= 3\sqrt{2}$$

(30°-60°-90° Triangle)

shortest leg = x

longer leg = $x\sqrt{3}$

hypotenuse = $2x$



Find \overline{AB} and \overline{AC}

\overline{AB} is opposite $\angle 30^\circ$ (the shortest leg) so $\overline{AB} = 7$

\overline{AC} is opposite $\angle 60^\circ$ so it is $\overline{AC} = 7\sqrt{3}$

