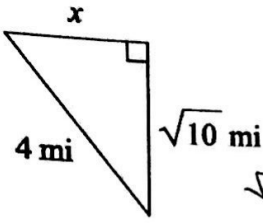
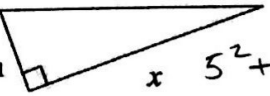


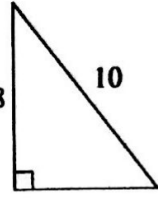
Warm-Up: Special Right Triangles

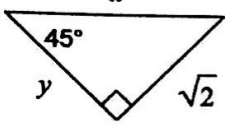
Name: \_\_\_\_\_

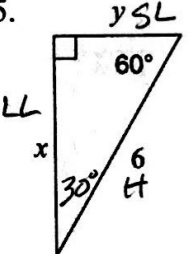
Find the missing side of each triangle. Leave your answers in simplest radical form.

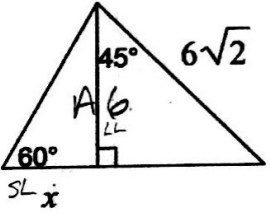
1.   $\sqrt{10}^2 + x^2 = 4^2$   
 $10 + x^2 = 16$   
 $x^2 = 6$   
 $x = \sqrt{6}$

2.   $5^2 + x^2 = 15^2$   
 $25 + x^2 = 225$   
 $x^2 = 200$   
 $x = \sqrt{200}$   
 $x = \sqrt{100 \cdot 2}$   
 $x = 10\sqrt{2}$

3.   $8^2 + x^2 = 10^2$   
 $64 + x^2 = 100$   
 $x^2 = 36$   
 $x = 6$

4.   $x = \sqrt{2} \cdot \sqrt{2}$   
 $x = 2$   
 $y = \sqrt{2}$

5.   $y = 3$   
 $x = 3\sqrt{3}$

6.   $\frac{6\sqrt{2}}{\sqrt{2}} = 6$   
 $x = \frac{6}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{6\sqrt{3}}{3} = 2\sqrt{3}$