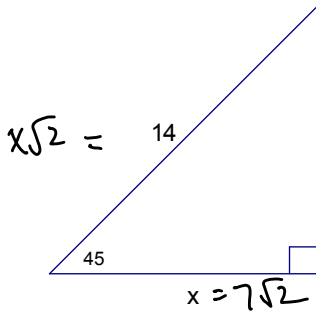
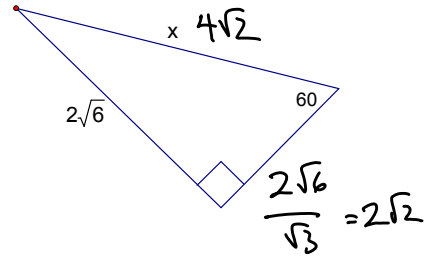
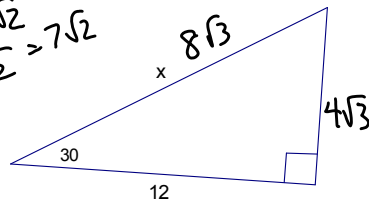


1. Determine the *exact* value of x . Simplify your answer.



$$\frac{14\sqrt{2}}{\sqrt{2} \cdot \sqrt{2}} = \frac{14\sqrt{2}}{2} = 7\sqrt{2}$$



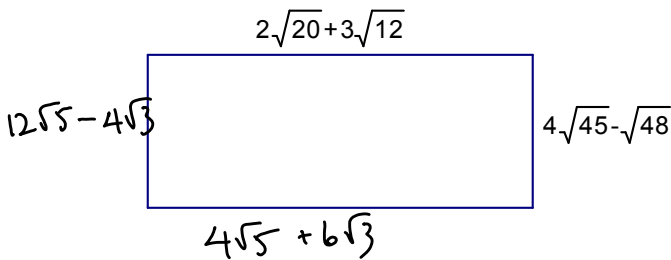
$$\frac{2\sqrt{6}}{\sqrt{3}} = 2\sqrt{2}$$

a) $x = \underline{7\sqrt{2}}$

b) $x = \underline{8\sqrt{3}}$

c) $x = \underline{4\sqrt{2}}$

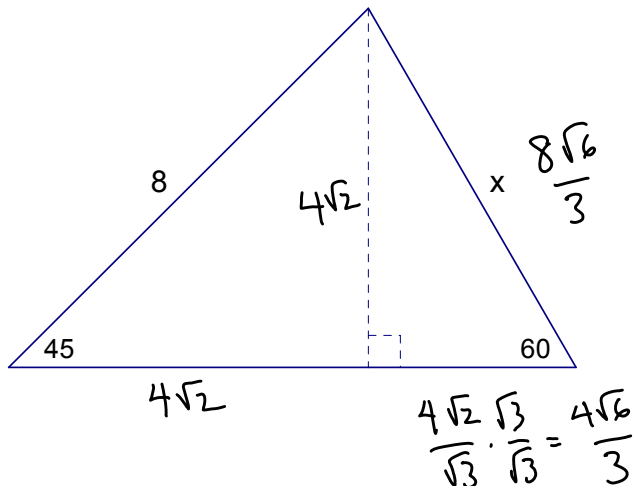
2. Determine the *exact* perimeter of the following rectangle. Simplify your answer.



$$\begin{aligned} \sqrt{20} &= 2\sqrt{5} \\ \sqrt{12} &= 2\sqrt{3} \\ \sqrt{45} &= 3\sqrt{5} \\ \sqrt{48} &= 4\sqrt{3} \end{aligned}$$

$$P = 2(12\sqrt{5} - 4\sqrt{3} + 4\sqrt{5} + 6\sqrt{3}) = 32\sqrt{5} + 4\sqrt{3}$$

3. Determine the *exact* value of x . Simplify your answer.



$$\frac{4\sqrt{2}\sqrt{3}}{\sqrt{3} \cdot \sqrt{3}} = \frac{4\sqrt{6}}{3}$$

$x = \underline{\frac{8\sqrt{6}}{3}}$