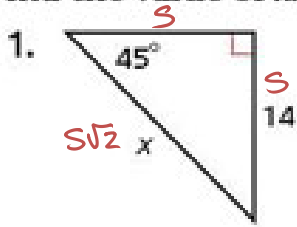
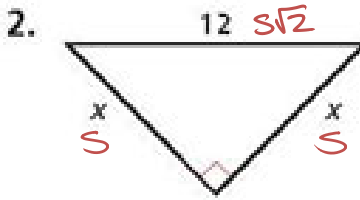


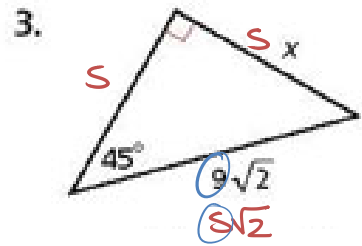
Find the value of  $x$ . Give your answer in simplest radical form.



$$x = 14\sqrt{2}$$

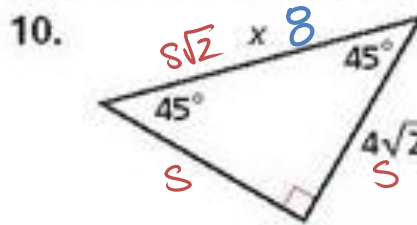
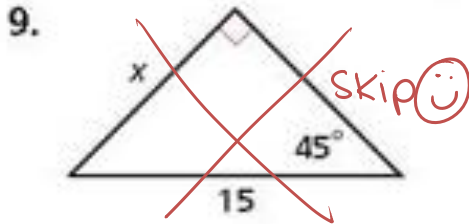


$$x = \frac{12 \cdot \sqrt{2}}{\sqrt{2} \cdot \sqrt{2}} = \frac{12\sqrt{2}}{2} = 6\sqrt{2}$$



$$s = 9$$

Find the value of  $x$ . Give your answer in simplest radical form.



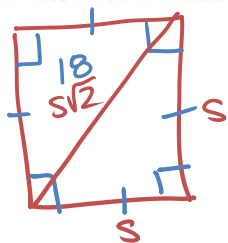
11.

$$\begin{aligned} s\sqrt{2} &= 4\sqrt{2} \cdot \sqrt{2} \\ s\sqrt{2} &= 4 \cdot (\sqrt{2} \cdot 2) \\ s\sqrt{2} &= 4 \cdot 2 \\ s\sqrt{2} &= 8 \end{aligned}$$

$$s\sqrt{2} = 8$$

**Multi-Step** Find the perimeter and area of each figure. Give your answers in simplest radical form.

19. a square with diagonal length 18 meters



$$s = \frac{18}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}}$$

$$s = \frac{18\sqrt{2}}{\sqrt{2} \cdot \sqrt{2}}$$

$$s = \frac{18\sqrt{2}}{2}$$

$$s = 9\sqrt{2}$$

Perimeter

$$P = 4s$$

$$P = 4(9\sqrt{2})$$

$$P = 36\sqrt{2} \text{ m}$$

Area

$$A = s^2$$

$$A = (9\sqrt{2})^2 = 9^2 \cdot (\sqrt{2} \cdot \sqrt{2}) = 81 \cdot 2 =$$

$$A = 162 \text{ m}^2$$