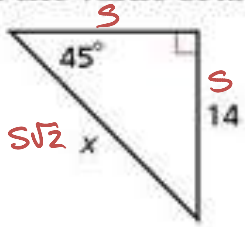
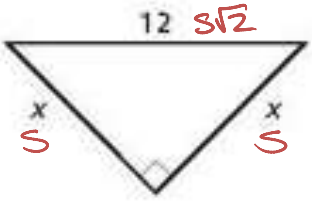
Day 4 – 5.8 Homework
Pg. 372-373 #1-3, 10, and 19

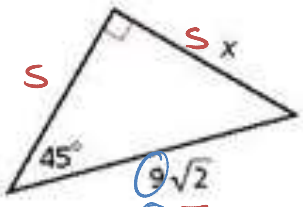
Find the value of x. Give your answer in simplest radical form.

1. 

$x = 14\sqrt{2}$

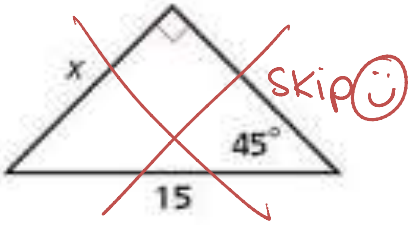
2. 

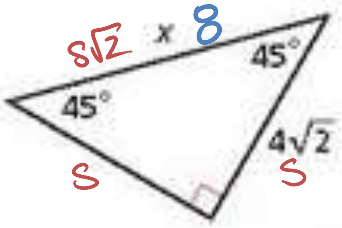
$x = \frac{12}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{12\sqrt{2}}{2} = 6\sqrt{2}$

3. 

$s = 9$

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

9. 

10. 

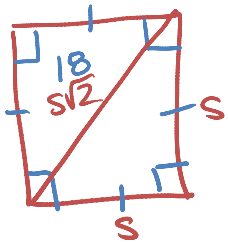
$s\sqrt{2} = 4\sqrt{2} \cdot \sqrt{2}$
$s\sqrt{2} = 4 \cdot (\sqrt{2 \cdot 2})$
$s\sqrt{2} = 4 \cdot 2$
$s\sqrt{2} = 8$

11.

$s\sqrt{2} = 8$

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

$P = 4s$

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

$P = 36\sqrt{2}$ m

Area

$A = s^2$

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

$A = 162\ m^2$