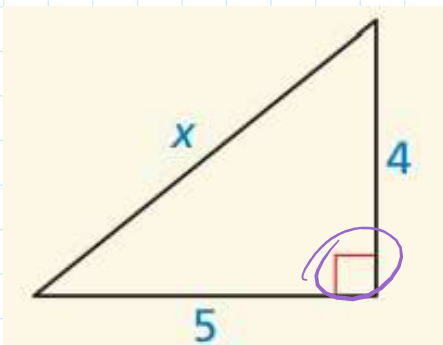
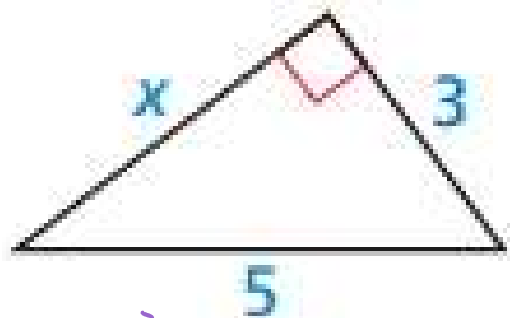


9.1-9.2 Quiz Review

Find the value of x

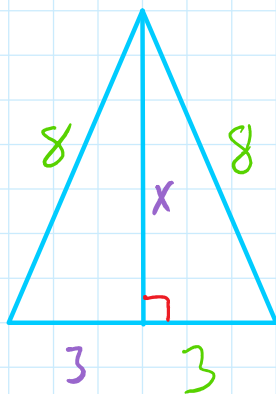


$$\begin{aligned}
 a^2 + b^2 &= c^2 \\
 5^2 + 4^2 &= x^2 \\
 25 + 16 &= x^2 \\
 \sqrt{41} &= x \\
 \boxed{\sqrt{41} = x}
 \end{aligned}$$



$$\begin{aligned}
 a^2 + b^2 &= c^2 \\
 x^2 + 3^2 &= 5^2 \\
 x^2 + 9 &= 25 \\
 x^2 &= 16 \\
 \sqrt{x^2} &= \sqrt{16} \\
 \boxed{x = 4}
 \end{aligned}$$

Find the area of the isosceles triangle.



$$\begin{array}{r} 55 \\ \wedge \\ 5 \parallel \end{array}$$

$$\begin{aligned} a^2 + b^2 &= c^2 \\ x^2 + 3^2 &= 8^2 \\ x^2 + 9 &= 64 \\ \begin{array}{r} -9 \quad -9 \\ \hline \end{array} & \\ \sqrt{x^2} &= \sqrt{55} \\ x &= \sqrt{55} \end{aligned}$$

$$A = \frac{1}{2}bh$$

$$A = \frac{1}{2} \cdot 6 \cdot \sqrt{55}$$

$$A = 3\sqrt{55} \text{ unit}^2$$

$$b = 6$$

$$h = \sqrt{55}$$

Is the triangle with the segment lengths *acute*, *right* or *obtuse*?

3, 4, 6

$$a^2 + b^2 = c^2$$

$$3^2 + 4^2 = 6^2$$

$$9 + 16 = 36$$

$$25 \neq 36 \therefore \text{Not Rt } \Delta$$

$$\begin{array}{r} 25 < 36 \\ a^2 + b^2 < c^2 \end{array} \therefore \text{Obtuse } \Delta$$

2.1, 2.8, 3.5

$$a^2 + b^2 = c^2$$

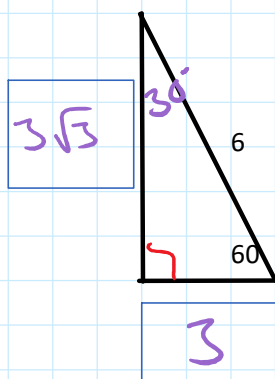
$$2.1^2 + 2.8^2 = 3.5^2$$

$$4.41 + 7.84 = 12.25$$

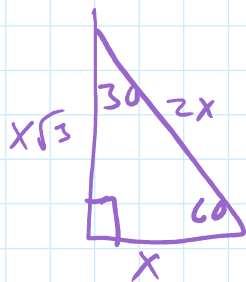
$$12.25 = 12.25$$

$$\therefore \text{Rt } \Delta$$

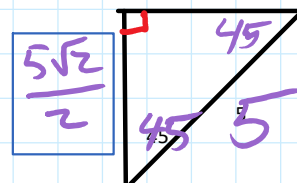
Label each side length. Write your final answer in simplest form in the box.



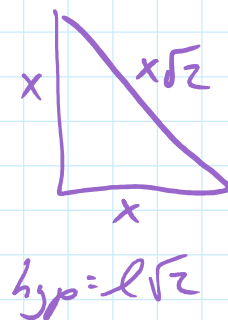
$$\begin{aligned} \text{hyp} &= sl \cdot 2 \\ \frac{6}{2} &= \frac{sl \cdot 2}{2} \\ 3 &= sl \end{aligned}$$



$$\begin{aligned} \text{hyp} &= sl \cdot 2 \\ sl &= sl \sqrt{3} \\ sl &= sl \sqrt{3} \\ sl &= 3\sqrt{3} \end{aligned}$$



$$\begin{aligned} \frac{\sqrt{2}}{\sqrt{2}} \cdot \frac{5}{\sqrt{2}} &= l \\ \frac{5\sqrt{2}}{2} &= l \end{aligned}$$



$$\frac{5}{\sqrt{2}} = \frac{l\sqrt{2}}{\sqrt{2}}$$

The End
 11 Questions
 Notecard allowed!
 GOOD LUCK

Practice sec 9.2 pg.
 475: 4-10EE, 11,

12-16EE
