

Name: _____

(1-6) Rationalize the Denominator

$$\textcircled{1} \quad \frac{3}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{3\sqrt{2}}{\sqrt{4}} = \boxed{\frac{3\sqrt{2}}{2}}$$

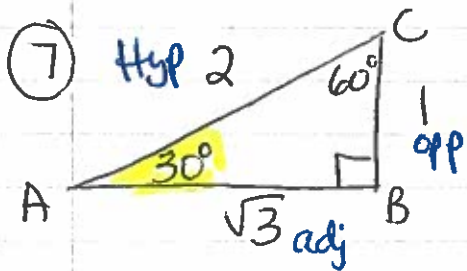
$$\textcircled{2} \quad \frac{2}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{2\sqrt{2}}{2} = \boxed{\sqrt{2}}$$

$$\textcircled{3} \quad \frac{2}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{2\sqrt{3}}{\sqrt{9}} = \boxed{\frac{2\sqrt{3}}{3}}$$

$$\textcircled{4} \quad \frac{1}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{\sqrt{3}}{\sqrt{9}} = \frac{\sqrt{3}}{3} \text{ or } \boxed{\frac{\sqrt{3}}{3}}$$

$$\textcircled{5} \quad \frac{1}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{\sqrt{2}}{\sqrt{4}} = \boxed{\frac{\sqrt{2}}{2}}$$

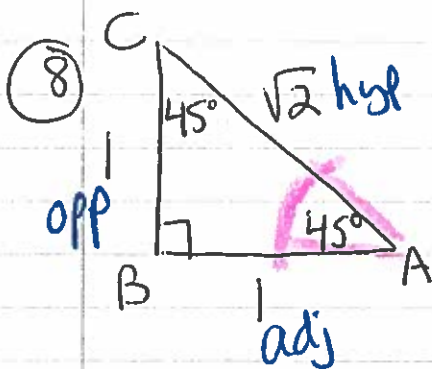
$$\textcircled{6} \quad \frac{3}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{3\sqrt{3}}{\sqrt{9}} = \frac{3\sqrt{3}}{3} = \boxed{\sqrt{3}}$$



$$\frac{O}{H} \sin A = \frac{1}{2} = \sin 30^\circ$$

$$\frac{A}{H} \cos A = \frac{\sqrt{3}}{2} = \cos 30^\circ$$

$$\frac{O}{A} \tan A = \frac{1}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{\sqrt{3}}{\sqrt{9}} = \boxed{\frac{\sqrt{3}}{3}}$$



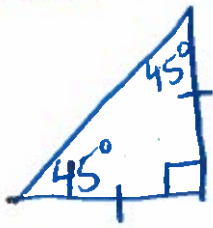
$$\frac{O}{H} \sin A = \frac{1}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{\sqrt{2}}{2} \text{ (tan } 30^\circ)$$

$$\frac{A}{H} \cos A = \frac{1}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{\sqrt{2}}{2}$$

$$\frac{O}{A} \tan A = \frac{1}{1} = \boxed{1}$$

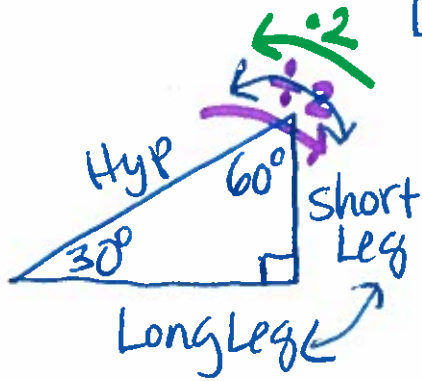
Special Right Triangles

Day 58



$$\text{leg} = \frac{\text{hypo}}{\sqrt{2}}$$

$$\text{hypo} = \text{leg} \cdot \sqrt{2}$$

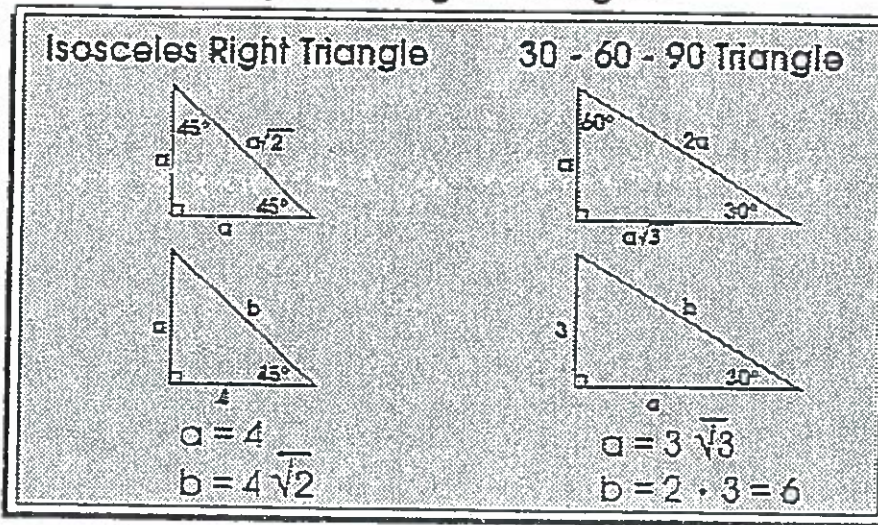


$$\begin{aligned} \text{short} \cdot 2 &= \text{hyp} \\ \text{hypo} \div 2 &= \text{short} \end{aligned}$$

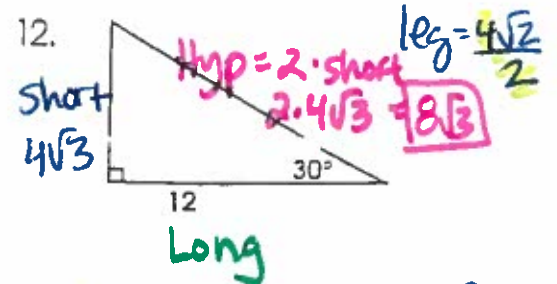
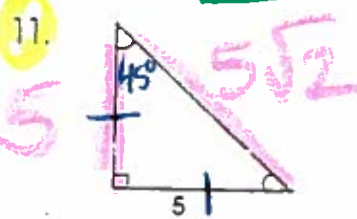
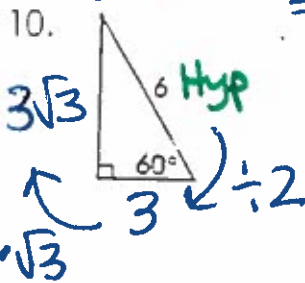
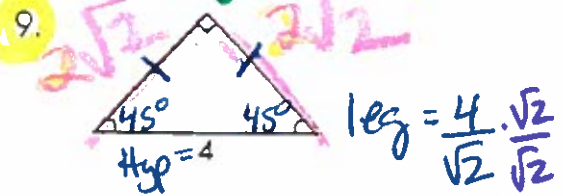
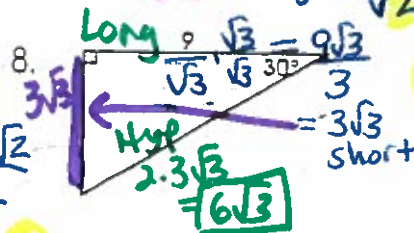
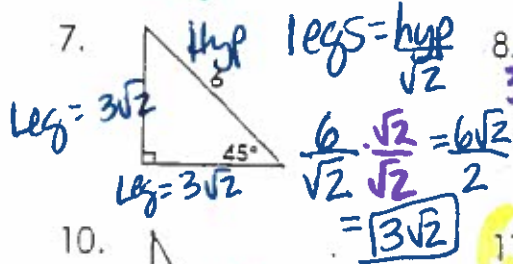
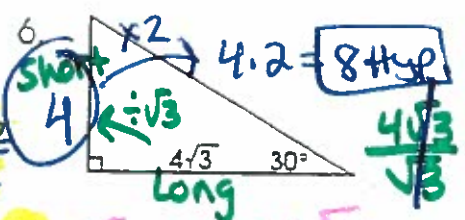
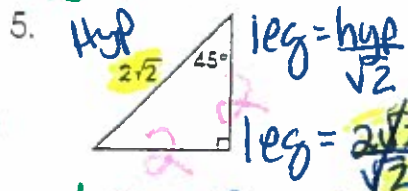
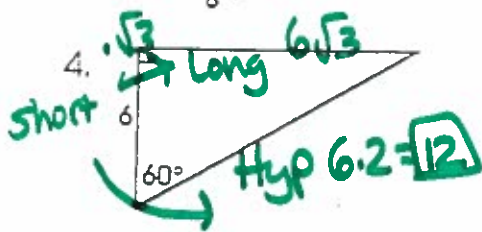
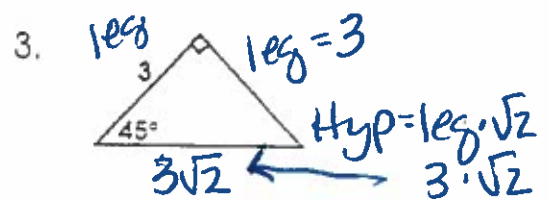
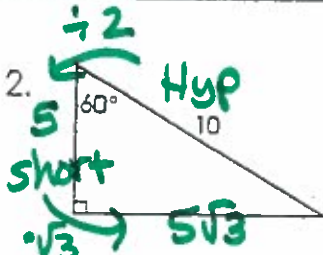
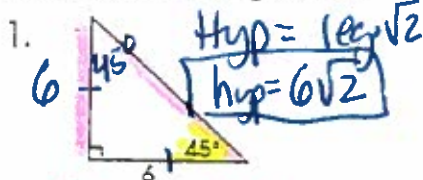
$$\begin{aligned} \text{short} \cdot \sqrt{3} &= \text{Long leg} \\ \text{long} \div \sqrt{3} &= \text{short Leg} \end{aligned}$$

Right Triangles

Special Right Triangles



Find the missing sides.



Short = $\frac{\text{long}}{\sqrt{3}}$ $\frac{12}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{12\sqrt{3}}{\sqrt{9}}$

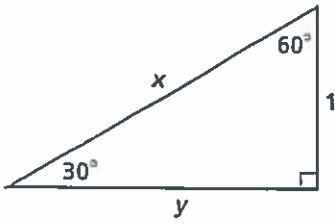
$\frac{12\sqrt{3}}{3} = 4\sqrt{3}$ Short

Use Before 13.2

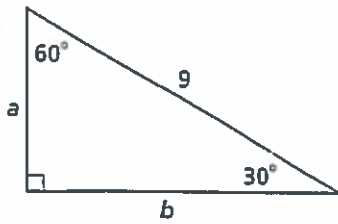
Special Right Triangles

Find the value of each variable. Leave your answers in simplest radical form.

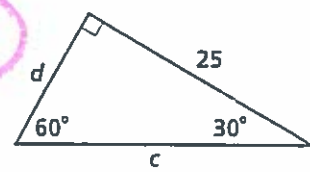
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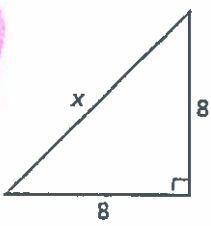
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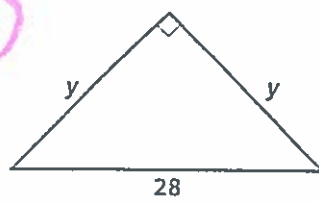
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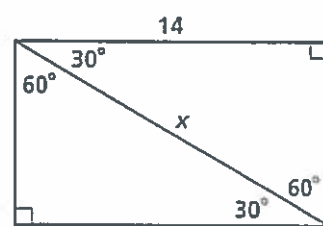
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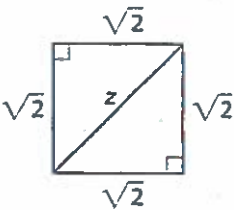
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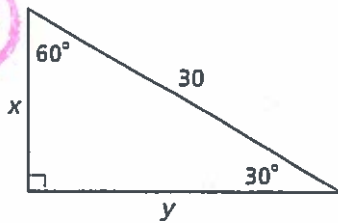
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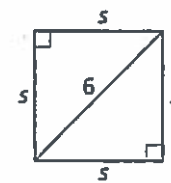
7.



8.

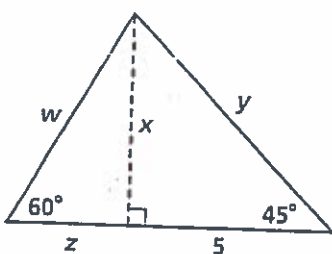


9.

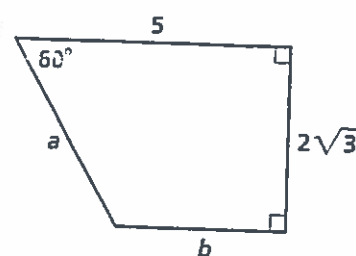


Algebra Find the value of each variable. Leave your answers in simplest radical form.

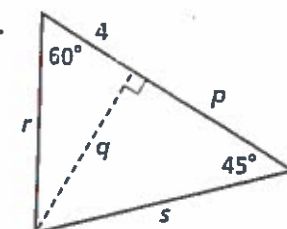
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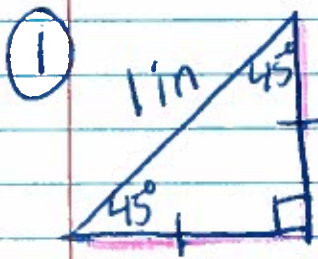
15.



16.

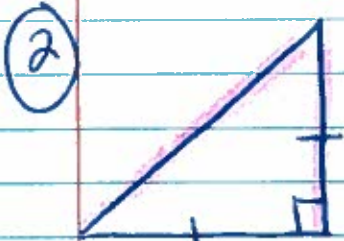


hyp = 1 in



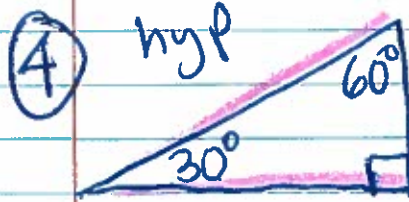
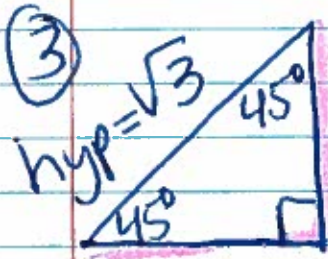
p. 717(1-12)

★ Draw pics
For each



leg = 2 cm

★ Label all 3
sides

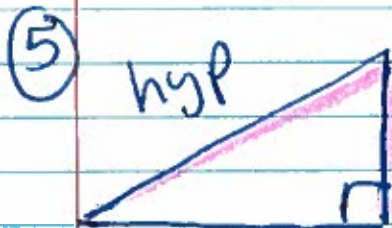


Given

short

3 in

Long

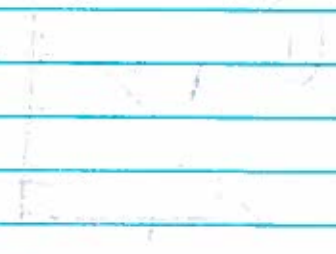


short

Long = 1 cm

(2-1) 5/11/21

10/11/21



10/11/21



10/11/21



10/11/21



10/11/21

10/11/21

