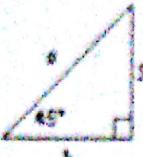


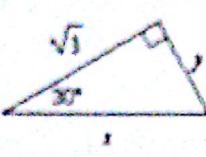
Integrated Geometry  
Chapter 5 Quiz #2

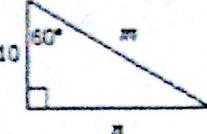
Name Kay Date 3/4/11 Period 3

Find the missing side lengths. Leave your answers as radicals in simplest form.

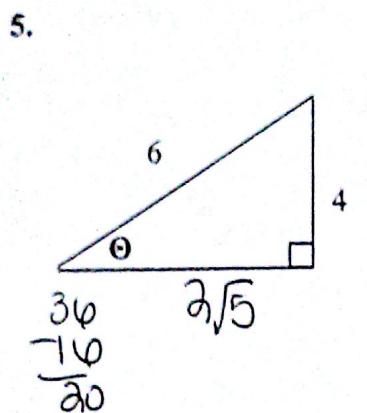
1)   $b = 5$   
 $a = 5\sqrt{2}$

2)   $y = 4$   
 $x = 4\sqrt{2}$

3)   $\sqrt{3} = \sqrt{3}$   
 $y = 1$   
 $x = 2$

4)   $n = 10\sqrt{3}$   
 $m = 20$

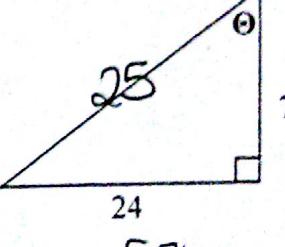
Find the values of the three trigonometric functions for the angle  $\Theta$  in simplest form for each triangle.



$$\sin \Theta = \frac{4}{5} = \frac{2}{3}$$

$$\cos \Theta = \frac{3}{5} = \frac{\sqrt{5}}{5}$$

$$\tan \Theta = \frac{4}{3} = \frac{4\sqrt{5}}{5\sqrt{5}} = \frac{4\sqrt{5}}{10}$$

6. 

$$\sin \Theta = \frac{7}{25}$$

$$\cos \Theta = \frac{24}{25}$$

$$\tan \Theta = \frac{7}{24}$$

The side lengths of a triangle are given. Determine whether it is a  $45^\circ - 45^\circ - 90^\circ$  triangle, a  $30^\circ - 60^\circ - 90^\circ$  triangle or neither.

7.  $12, 6, 6\sqrt{2}$

8.  $4, 4, 4\sqrt{2}$

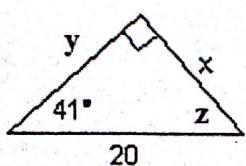
9.  $10, 20, 10\sqrt{3}$

neither

45-45-90

30-60-90

10. Find the value of the missing variables.



$$\sin 41^\circ = \frac{x}{20}$$

$$20 \sin 41^\circ = x$$

$$\cos 41^\circ = \frac{y}{20}$$

$$x = \underline{13.1}$$

$$y = \underline{15.1}$$

$$z = \underline{49^\circ}$$

**Integrated Geometry**  
**Chapter 5 Quiz #2**

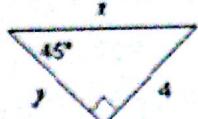
Name \_\_\_\_\_  
Date \_\_\_\_\_ Period \_\_\_\_\_

Find the missing side lengths. Leave your answers as radicals in simplest form.

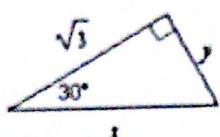
1)



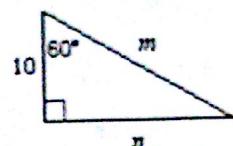
2)



3)

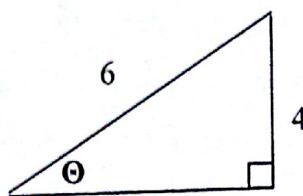


4)



Find the values of the three trigonometric functions for the angle  $\Theta$  in simplest form for each triangle.

5.



$$\sin \Theta = \underline{\hspace{2cm}}$$

$$\cos \Theta = \underline{\hspace{2cm}}$$

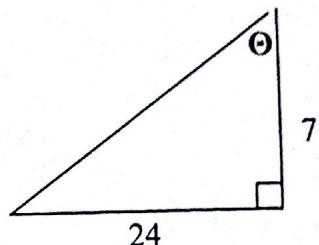
$$\tan \Theta = \underline{\hspace{2cm}}$$

6.

$$\sin \Theta = \underline{\hspace{2cm}}$$

$$\cos \Theta = \underline{\hspace{2cm}}$$

$$\tan \Theta = \underline{\hspace{2cm}}$$



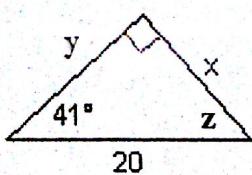
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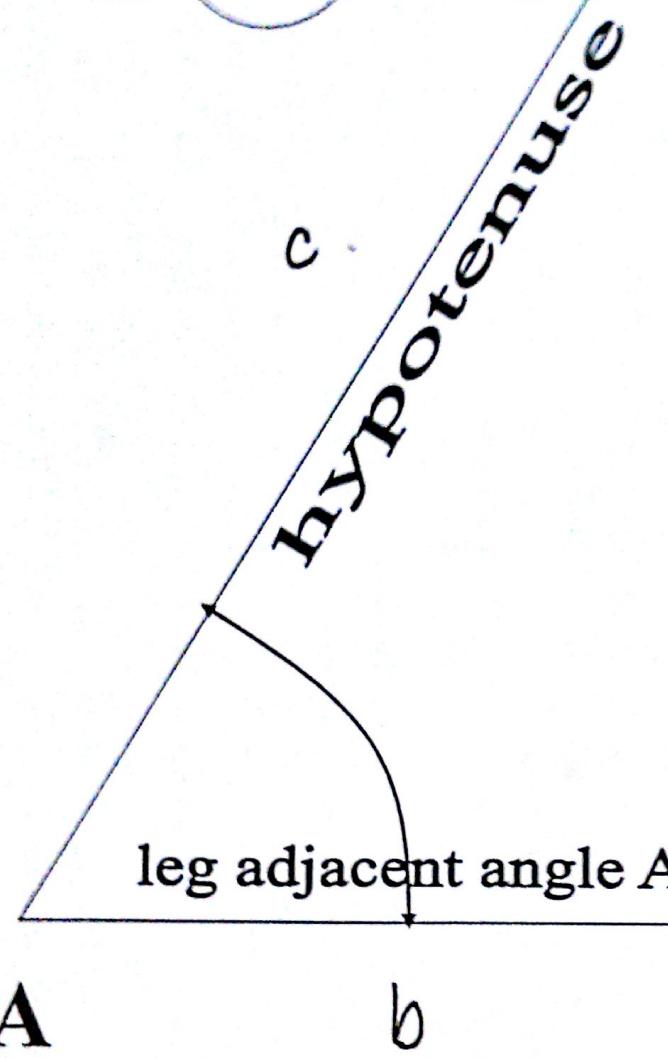
9.  $10, 20, 10\sqrt{3}$

10. Find the value of the missing variables.



$$x = \underline{\hspace{2cm}} \\ y = \underline{\hspace{2cm}} \\ z = \underline{\hspace{2cm}}$$

What are the  
three basic  
trigonometry  
functions?



B

leg opposite angle A

$$\sin A = \frac{\text{opposite leg}}{\text{hypotenuse}}$$

$$\sin A = \underline{\hspace{2cm}}$$

$$\sin B = \underline{\hspace{2cm}}$$

$$\cos A = \frac{\text{adjacent leg}}{\text{hypotenuse}}$$

$$\cos A = \underline{\hspace{2cm}}$$

$$\cos B = \underline{\hspace{2cm}}$$

$$\tan A = \frac{\text{opposite leg}}{\text{adjacent leg}}$$

$$\tan A = \underline{\hspace{2cm}}$$

$$\tan B = \underline{\hspace{2cm}}$$



Chief SohCahToa

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