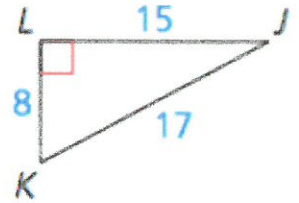


Pre-Calculus I  
Worksheet I-I

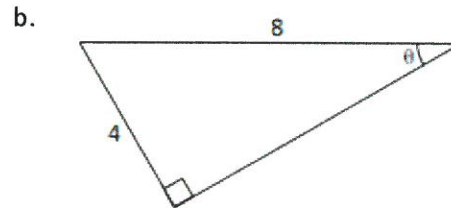
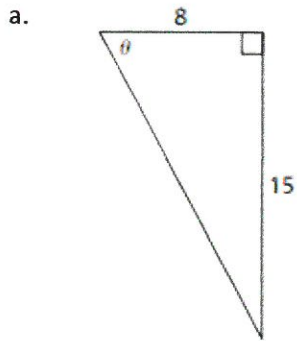
Name \_\_\_\_\_

1. Write the values of the trigonometric functions of angle K.



2. In right triangle  $\triangle ABC$ , with right angle C and  $\cos(A) = \frac{12}{13}$ , find the value of the remaining trigonometric functions for angle A.

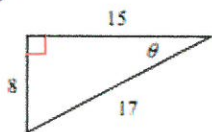
3. Find the values of sine, cosine, and tangent of angle  $\theta$ .



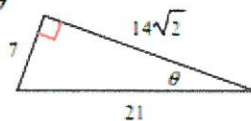
4. Let  $\theta$  be an acute angle of a right triangle. Evaluate the other five trigonometric functions of  $\theta$  if  $\tan \theta = \frac{4}{9}$ .

5. Find the value of the trigonometric function indicated.

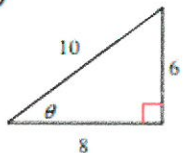
a.  $\sec \theta$



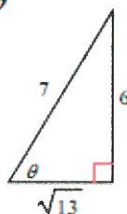
b.  $\cos \theta$



c.  $\tan \theta$



d.  $\sin \theta$



6. Use special right triangles to find the exact values of each of the following. (Exact values means fractions with simplified radicals... Do not just plug these into your calculator).

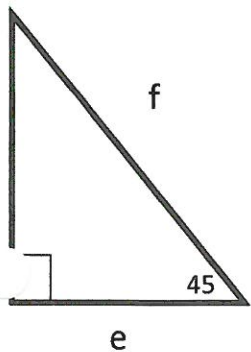
a.  $\sec 30^\circ$

b.  $\csc 60^\circ$

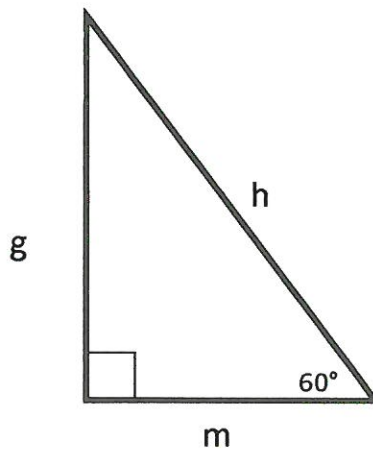
c.  $\cot 45^\circ$

d.  $\csc 45^\circ$

7. Find the missing side lengths below.

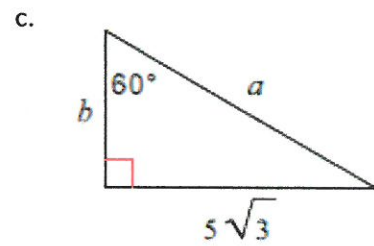
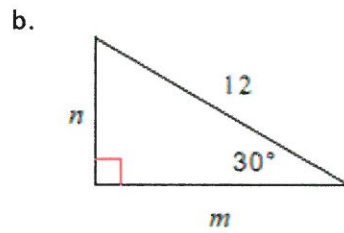
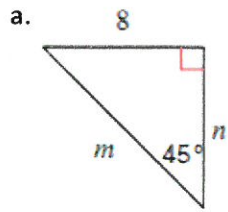


$e$	$f$	$d$
5		
	$\sqrt{6}$	
		11
		1



$m$	$h$	$g$
3		
		5
	8	
$1/2$		

8. Find the exact value of the missing sides in the triangles below. Hint: These are special right triangles.



9. Is 15, 112, 113 a Pythagorean Triple? Show work to support your answer.

10. Find the distance between the pair of points. Simplify all radicals!  $(-2, 6)$  and  $(3, -4)$

11. The distance between  $(-2, 1)$  and  $(0, y)$  is  $2\sqrt{26}$ . Find ALL possible values of  $y$ .