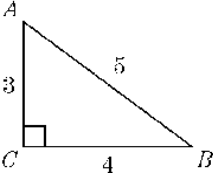
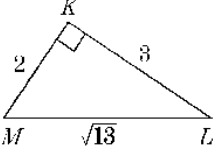

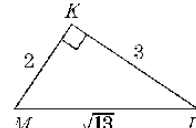
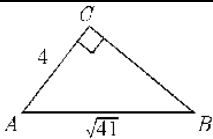
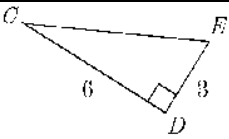


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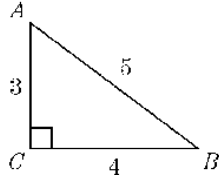
Pre-Calculus 11: HW 2.a Basic Trigonometric Review

1. Given each triangle, indicate which side is the "Hypotenuse", "Opposite" and "Adjacent" to the angle used. Then find the value of the trig ratio and angle:

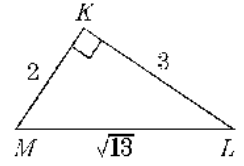
<p>a) $\sin A =$</p>  <p>Hypotenuse:</p> <p>Opposite:</p> <p>Adjacent:</p>	<p>b) $\cos M =$</p>  <p>Hypotenuse:</p> <p>Opposite:</p> <p>Adjacent:</p>
<p>c) $\tan E =$</p>  <p>Hypotenuse:</p> <p>Opposite:</p> <p>Adjacent:</p>	<p>d) $\sin L =$</p>  <p>Hypotenuse:</p> <p>Opposite:</p> <p>Adjacent:</p>
<p>e) $\tan A =$</p>  <p>Hypotenuse:</p> <p>Opposite:</p> <p>Adjacent:</p>	<p>f) $\cos C =$</p>  <p>Hypotenuse:</p> <p>Opposite:</p> <p>Adjacent:</p>

2. Indicate which angle is equal to "x" and then solve for the angle:

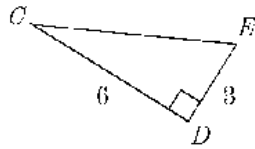
a) $\sin x = 0.6$



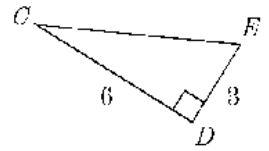
b) $\sin x = \frac{3\sqrt{13}}{13}$



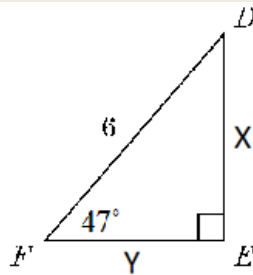
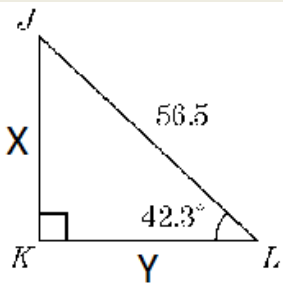
c) $\cos x = \frac{\sqrt{5}}{5}$



d) $\tan x = 2$



3. Find the length of the missing sides:



4. When I use the regular trigonometric functions like sine, cosine, and tangent, does it only work for right triangles? Or can I use it for all sorts of triangles?
5. When I sine an angle like 60° , it gives me a value like 0.866025403. What does this number represent?
6. When I cosine or sine any angle in a right triangle will I ever get a value greater than 1? Why or why not?
7. What does the inverse trigonometric function do? Ie: \sin^{-1} , \cos^{-1} , or \tan^{-1} . What is the purpose of these inverse functions?
8. When I take sine 45 and divide it by cosine 45, does it equal to tangent 45? Why is it equal? Does sine an angle divided by cosine an angle always to tangent the angle? Why or why not?
9. A 20meter long wire is attached to the top of a telephone pole 15.5 meters tall. What is the exact measure of the angle the wire makes with the ground?

