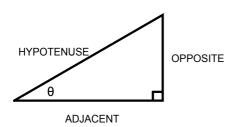
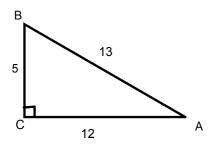
Trig Ratios in Right Triangles

No matter how large or small a triangle is, if the angles are the same size, the ratios of corresponding sides are equal.

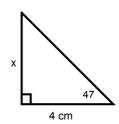


The 3 primary trig ratios for θ are:

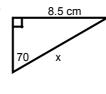
Example 1 Determine the 3 primary trig ratios for angles A and B.



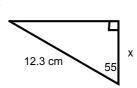
a.



b.

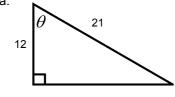


C.

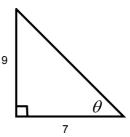


 $\underline{\mathsf{Example}\,3}\qquad \mathsf{Determine}\;\mathsf{the}\;\mathsf{measure}\;\mathsf{of}\;\mathsf{angle}\;\theta\;\mathsf{in}\;\mathsf{each}\;\mathsf{triangle}.$

a.



b.



Example 4 A 10 foot ladder leans against a wall. From the base of the ladder, the angle of elevation to the top of the ladder is 65 degrees. How far is the base of the ladder from the wall?