

Algebra 2

10-01 Right Triangle Trigonometry

If you have a right triangle, there are six ratios of sides that are always constant

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

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

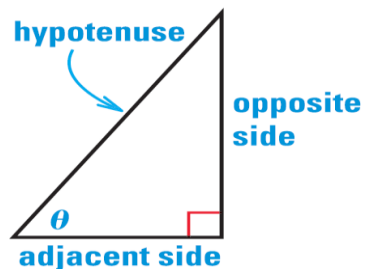
$$\tan \theta = \underline{\hspace{2cm}}$$

SOH
CAH
TOA

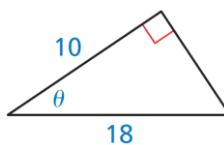
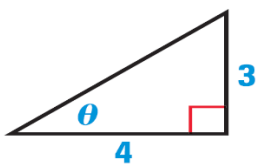
$$\csc \theta = \underline{\hspace{2cm}}$$

$$\sec \theta = \underline{\hspace{2cm}}$$

$$\cot \theta = \underline{\hspace{2cm}}$$



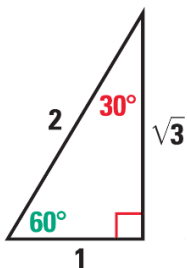
Evaluate the six trigonometric functions of the angle θ .



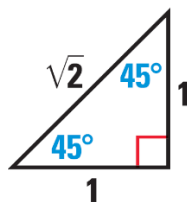
In a right triangle, θ is an acute angle and $\cos \theta = \frac{7}{10}$. What is $\sin \theta$?

Special Right Triangles

30° - 60° - 90°

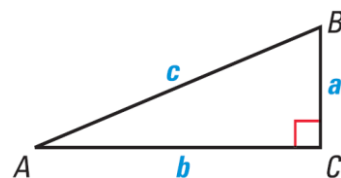


45° - 45° - 90°

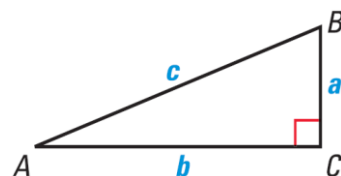


Use the diagram to solve the right triangle if...

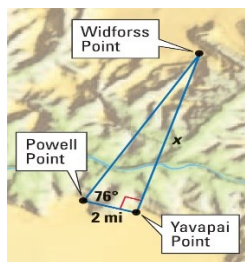
$$B = 60^\circ, a = 7$$



$$A = 32^\circ, b = 10$$



Find the distance between Powell Point and Widforss Point.



526 #1, 5, 9, 13, 15, 17, 21, 23, 25, 29, 33, 37, 39, 45, 49, 51, 53, 55, 58, 60 = 20