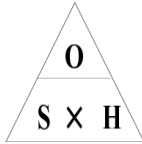
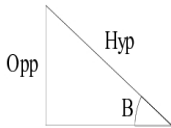


SOH-CAH-TOA

SIN



Name the sides



Find the size of the angle

$$\sin(B) = \frac{70}{100} = 0.7$$

$$B = \sin^{-1}(0.7) = 44.4$$

Find the length of the Opposite side

$$X = \sin(40) \times 50$$

$$X = 32.1$$

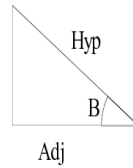
Find the length of the Hypotenuse

$$X = \frac{17}{\sin(40)} = 26.4$$

COS



Name the sides



Find the size of the angle

$$\cos(B) = \frac{A}{H} = \frac{8}{12} = 0.6667$$

$$\cos^{-1}(0.6667) = 48.2$$

Find the length of the Adjacent side

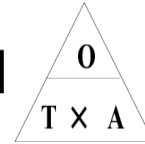
$$X = \cos(25) \times 85$$

$$X = 77.0$$

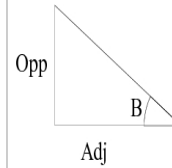
Find the length of the Hypotenuse

$$X = \frac{16}{\cos(70)} = 46.8$$

TAN



Name the sides



Find the size of the angle

$$\tan(B) = \frac{10}{17.5} = 0.5714$$

$$\tan^{-1}(0.5714) = 29.7$$

Find the length of the Opposite side

$$X = \tan(35) \times 17.5$$

$$X = 12.3$$

Find the length of the Adjacent side

$$X = \frac{5}{\tan(20)} = 13.7$$