

Trigonometric Ratios

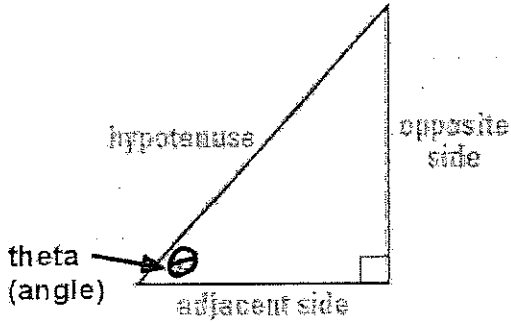
Name: Key

Trigonometric Ratio – The ratio of two sides in a right triangle.

Hypotenuse – The longest side of a right triangle. The side across from the right angle.

Opposite Side (Leg) – The side opposite or across from the reference angle.

Adjacent Side (Leg) – The side next to the reference angle that isn't the hypotenuse.



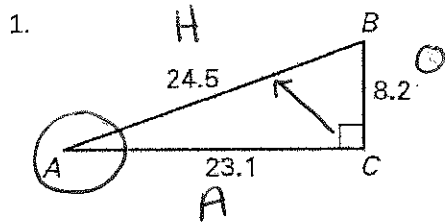
$$\sin \theta = \frac{\text{Opposite}}{\text{Hypotenuse}} = \frac{O}{H}$$

$$\cos \theta = \frac{\text{Adjacent}}{\text{Hypotenuse}} = \frac{A}{H}$$

$$\tan \theta = \frac{\text{Opposite}}{\text{Adjacent}} = \frac{O}{A}$$

Soh
Cah
Toa

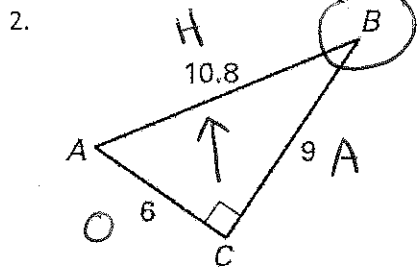
Oscar Had
a Heap
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$$\sin A = \frac{O}{H} = \frac{8.2}{24.5} = .335$$

$$\cos A = \frac{A}{H} = \frac{23.1}{24.5} = .943$$

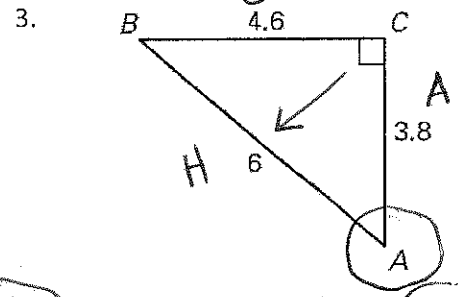
$$\tan A = \frac{O}{A} = \frac{8.2}{23.1} = .355$$



$$\sin B = \frac{O}{H} = \frac{6}{10.8} = .556$$

$$\cos B = \frac{A}{H} = \frac{9}{10.8} = .833$$

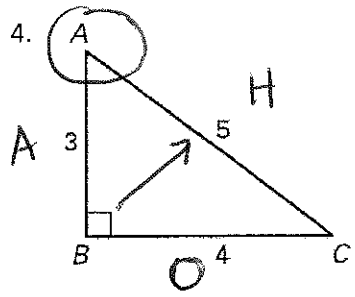
$$\tan B = \frac{O}{A} = \frac{6}{9} = \frac{2}{3} = .667$$



$$\sin A = \frac{O}{H} = \frac{4.6}{6} = .767$$

$$\cos A = \frac{A}{H} = \frac{3.8}{6} = .633$$

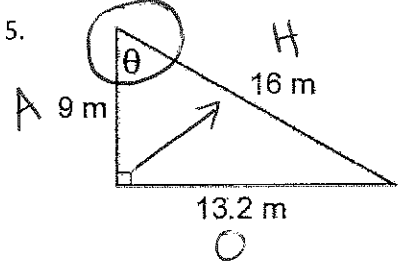
$$\tan A = \frac{O}{A} = \frac{4.6}{3.8} = 1.211$$



$$\sin A = \frac{O}{H} = \frac{4}{5} = .8$$

$$\cos A = \frac{A}{H} = \frac{3}{5} = .6$$

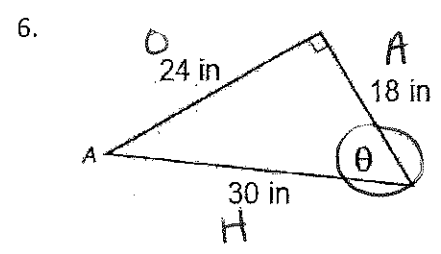
$$\tan A = \frac{O}{A} = \frac{4}{3} = 1.333$$



$$\sin \theta = \frac{O}{H} = \frac{13.2}{16} = .825$$

$$\cos \theta = \frac{A}{H} = \frac{9}{16} = .563$$

$$\tan \theta = \frac{O}{A} = \frac{13.2}{9} = 1.467$$



$$\sin \theta = \frac{O}{H} = \frac{24}{30} = \frac{4}{5} = .8$$

$$\cos \theta = \frac{A}{H} = \frac{18}{30} = \frac{3}{5} = .6$$

$$\tan \theta = \frac{O}{A} = \frac{24}{18} = \frac{4}{3} = 1.333$$