

## Definitions:

**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** - the side opposite (across from the right angle)

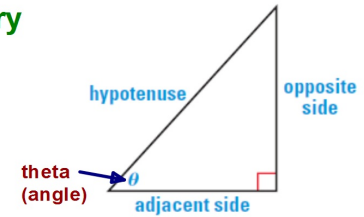
**Adjacent Side** - the side next to the angle that isn't the hypotenuse.

## Right Triangle Trigonometry

$$\sin \theta = \frac{\text{opp}}{\text{hyp}}$$

$$\cos \theta = \frac{\text{adj}}{\text{hyp}}$$

$$\tan \theta = \frac{\text{opp}}{\text{adj}}$$

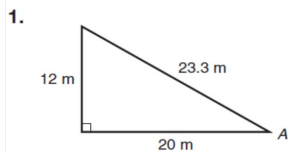


3 Ways to help you remember:

1. **Soh Cah Toa**
2. **Oscar Had A Heap Of Apples**
3. **Some Old Hippie Caught Another Hippie Trip'n On Apples**

## Find the Trigonometric Ratios $\theta$

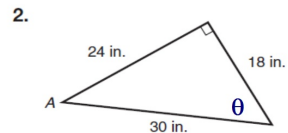
$$\sin \theta = \frac{\text{opp}}{\text{hyp}} \quad \cos \theta = \frac{\text{adj}}{\text{hyp}} \quad \tan \theta = \frac{\text{opp}}{\text{adj}}$$



$$\sin A =$$

$$\cos A =$$

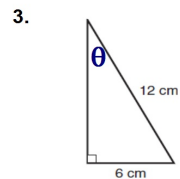
$$\tan A =$$



$$\sin \theta =$$

$$\cos \theta =$$

$$\tan \theta =$$

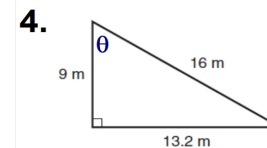


$$\sin \theta =$$

$$\cos \theta =$$

$$\tan \theta =$$

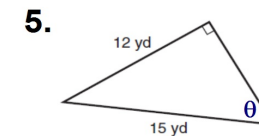
## You Practice: Find the Trigonometric Ratios $\theta$



$$\sin \theta =$$

$$\cos \theta =$$

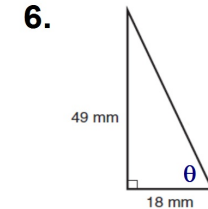
$$\tan \theta =$$



$$\sin \theta =$$

$$\cos \theta =$$

$$\tan \theta =$$



$$\sin \theta =$$

$$\cos \theta =$$

$$\tan \theta =$$