

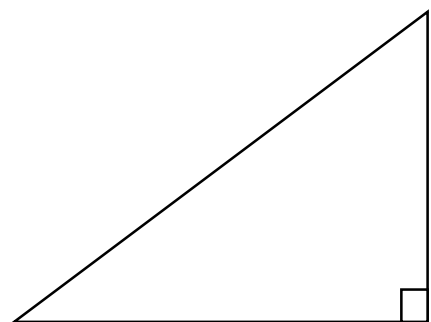
Learning Objective(s) _____:

Main Ideas/ Questions

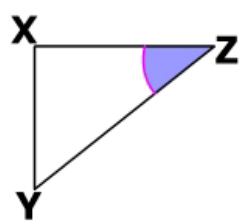
Triangle Labels of Trigonometry

Notes

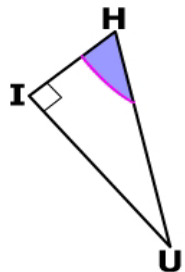
Trigonometry – The study of angles and sides in _____



Examples



- a. What side is opposite of the shaded angle?
- b. What side is adjacent to Angle Z?



- c. What side is opposite of the shaded angle?
- d. What side is adjacent to Angle H?

Trigonometry Ratios

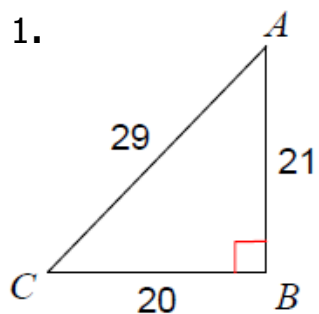
Sine	Cosine	Tangent
SOH CAH TOA		
$S = \frac{O}{H}$	$C = \frac{A}{H}$	$T = \frac{O}{A}$

**Main Ideas/
Questions**

Examples

Notes

1.

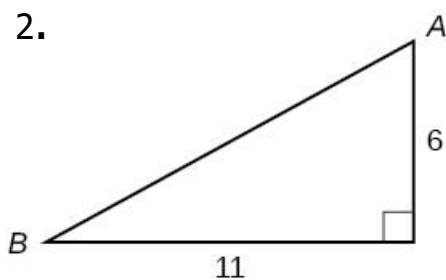


a. Find all 3 ratios for Angle A.

b. Find all 3 ratios for Angle C.

c. Did you notice anything?

2.



a. Find all 3 ratios for Angle A.

b. Find all 3 ratios for Angle B.

c. Did you notice anything again?

3. If the $\sin(\theta) = \frac{3}{5}$, what is the $\cos(\theta)$?

4. If the $\tan(\theta) = \frac{7}{\sqrt{15}}$, what is the $\sin(\theta)$?

**Main Ideas/
Questions**

Evaluating Trig Ratios

Notes

1. Evaluate $\sin(23)$ to the nearest thousandths.
2. Evaluate $\cos(30)$ to the nearest thousandths.
3. Evaluate $\tan(20)$ to the nearest thousandths.
4. Evaluate the $\cos(5)$ and $\sin(85)$ to the nearest thousandths.
5. Evaluate the $\sin(43)$ and $\cos(47)$ to the nearest thousandths.

Co-functions

Co-functions have the same _____.

$$\sin(\theta) = \cos(90 - \theta)$$

$$\cos(\theta) = \sin(90 - \theta)$$

$$\tan(\theta) = \frac{1}{\tan(90 - \theta)}$$

1. Without using a calculator, what would be equal to $\sin(25)$?
2. Without using a calculator, what would be equal to $\cos(45)$?
3. Without using a calculator, what would be equal to $\tan(30)$?
4. Without a calculator, what would be equal to $\frac{1}{\tan(29)}$?