

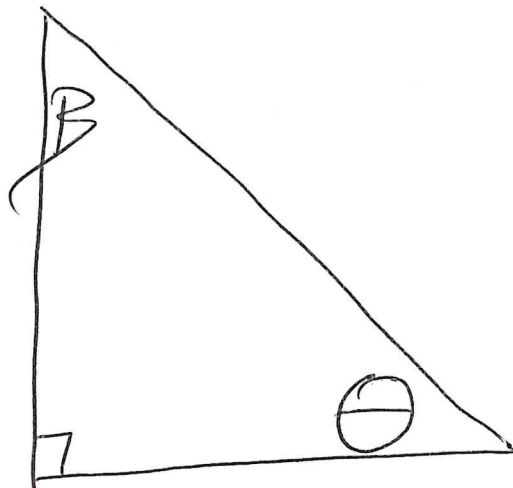
1/4/2022 M2 Lesson 28/29

Trigonometry ratios to find Angle Measures!

\ominus - theta
(unknown angles)

β - beta (unknown angle)

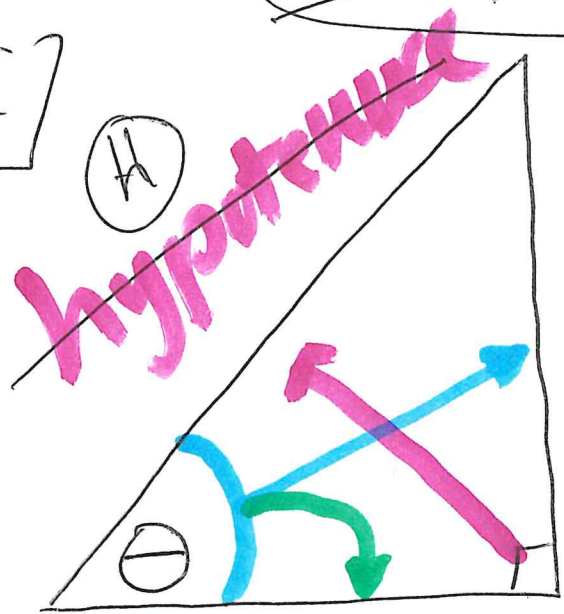
ex1



1

SOH CAH TOA

ie 1



Find $\theta =$ _____

adjacent side

opposite side

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

tan
0.75

decimal

closest do not go over!
~ 36°

degree

Tangent $\theta = \frac{\text{opposite}}{\text{adjacent}}$

$$3 \div 4 = 0.75$$

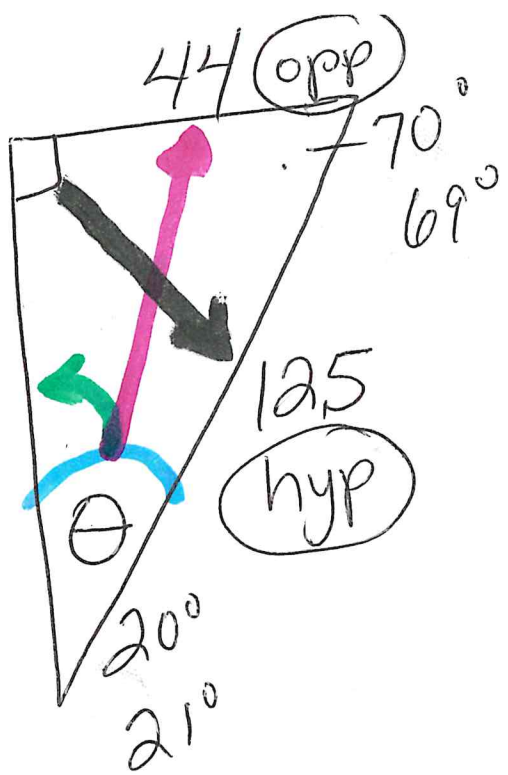
TOA

calc
2nd tan (0.75) $\hat{=}$ 36.8

$\hat{=}$ 37°

ie 2

~~adj~~



SOH
~~CAH~~
~~TOA~~

$$\frac{180}{-110} \\ \underline{\quad} \\ 70$$

use sheet

$$\sin \theta = \frac{O}{H} = \frac{44}{125} = 0.352 = \frac{\approx 20}{\underline{\quad}}^{\circ}$$

calc

$$44 \div 125 = 0.352$$

$\approx \underline{\underline{21}}^{\circ}$

$$2^{nd} \sin(0.352)$$

ie3

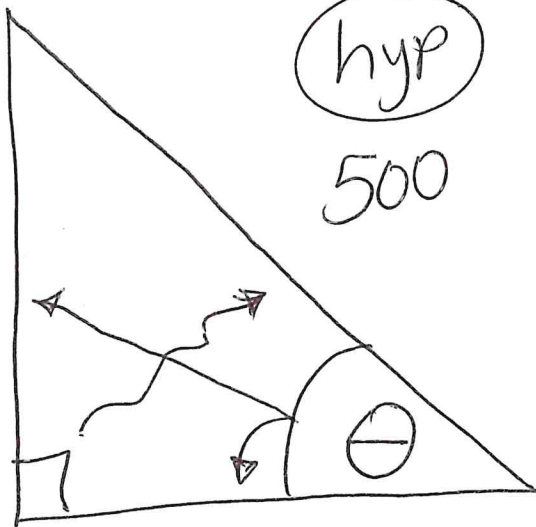
hyp
500

~~SOH~~

CAH

~~TOA~~

~~opp~~



400
adj

$$\underline{\cos} \theta = \frac{A}{H} = \frac{400}{500} = \underline{0.8} = \underline{36^\circ}$$

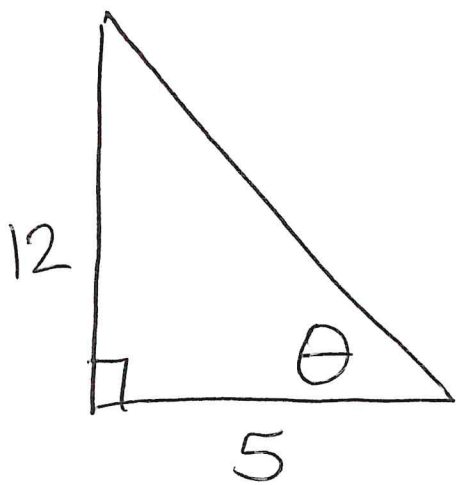
Sheet $\cos(0.8) = 36^\circ$

Calc. ^{2nd} $\cos(0.8) = 37^\circ$

M2 Lesson 38/39

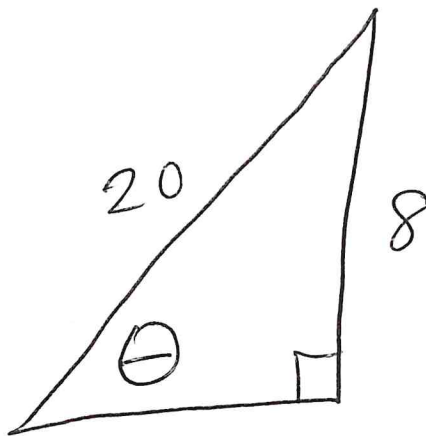
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1) Find θ



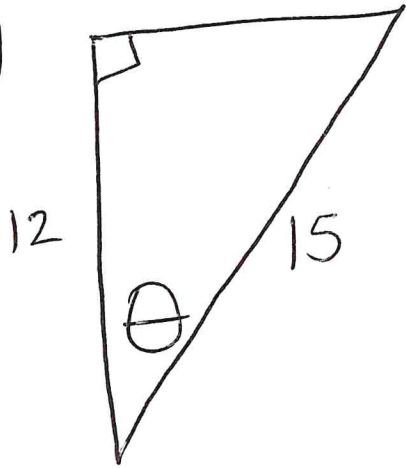
$\theta =$ _____

2.) Find θ



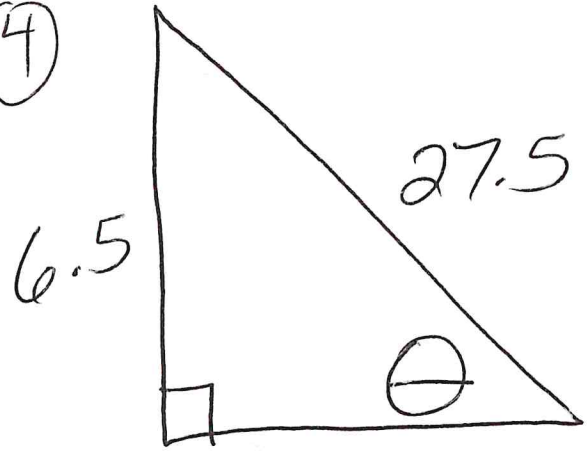
$\theta =$ _____

3.)



_____ θ = _____

4)



_____ θ = _____