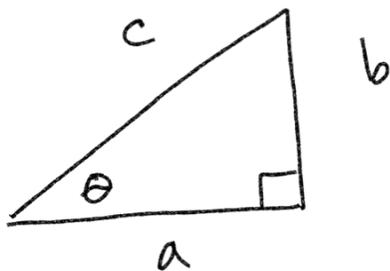


TH-6 Geometry Week 31



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

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

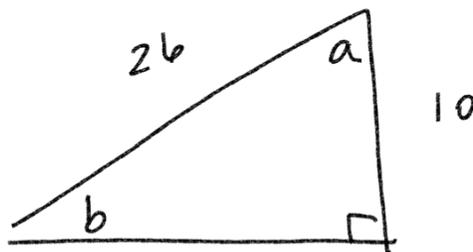
$$\tan \theta = \frac{\text{opp}}{\text{adj}} = \frac{b}{a}$$

SOH CAH TOA

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

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

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



sin a =  $\frac{24 \div 2}{26 \div 2} = \frac{12}{13}$

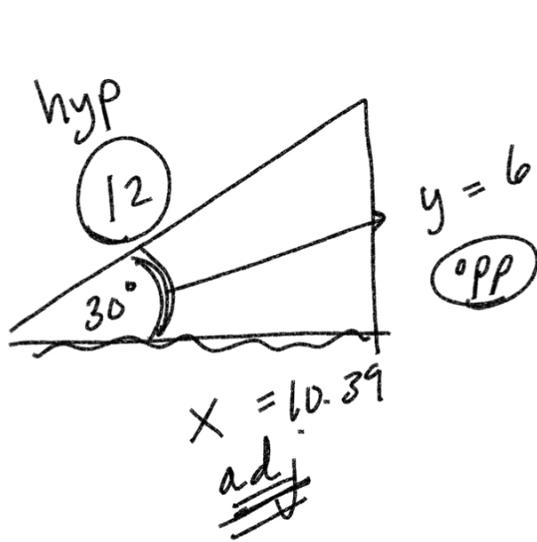
cos b =  $\frac{24 \div 2}{26 \div 2} = \frac{12}{13}$

cos a =  $\frac{10 \div 2}{26 \div 2} = \frac{5}{13}$

sin b =  $\frac{10 \div 2}{26 \div 2} = \frac{5}{13}$

tan a =  $\frac{24 \div 2}{10 \div 2} = \frac{12}{5}$

tan b =  $\frac{\text{opp}}{\text{adj}} = \frac{10 \div 2}{24 \div 2} = \frac{5}{12}$



$$\frac{\text{adj}}{\text{hyp}} = \cos \theta = \frac{x}{12}$$

SOH CAH TOA

$$12 \left( \cos 30^\circ \right) = \left( \frac{x}{12} \right) 12$$

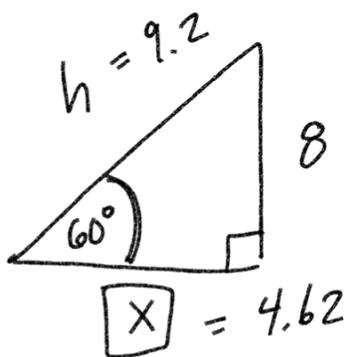
$$\sin \theta = \frac{\text{opp}}{\text{hyp}}$$

$$x = 12 \cos 30^\circ = 12 (0.866) = 10.39$$

$$\sin 30^\circ = \frac{y}{12}$$

$$12 \left( \sin 30^\circ \right) = \left( \frac{y}{12} \right) 12$$

$$y = 12 \sin 30^\circ = 12 (0.5) = 6$$



$$\tan 60^\circ = \frac{8}{x}$$

$$4 = \frac{12}{3}$$

$$3 = \frac{12}{4}$$

$$x = \frac{8}{\tan 60^\circ} = 4.62$$

$$\sin 60^\circ = \frac{8}{h}$$

$$h = \frac{8}{\sin 60^\circ} = 9.2$$

HW

HW/28  
a

due tonight

HW/a 30 due

May 23<sup>rd</sup>

Test

5/6

due May 23<sup>rd</sup>

~~Final Exam~~