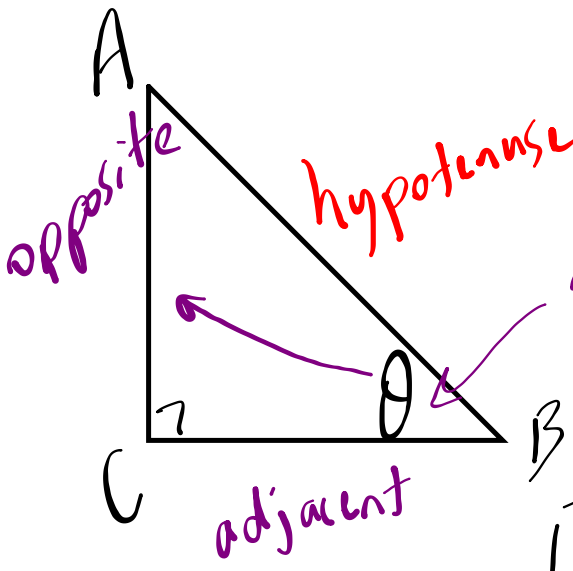
Monday, October 3rd

Show this video to start... "Gettin' TRIGGY with it!"

Click on the globe



$a^2 + b^2 = c^2$

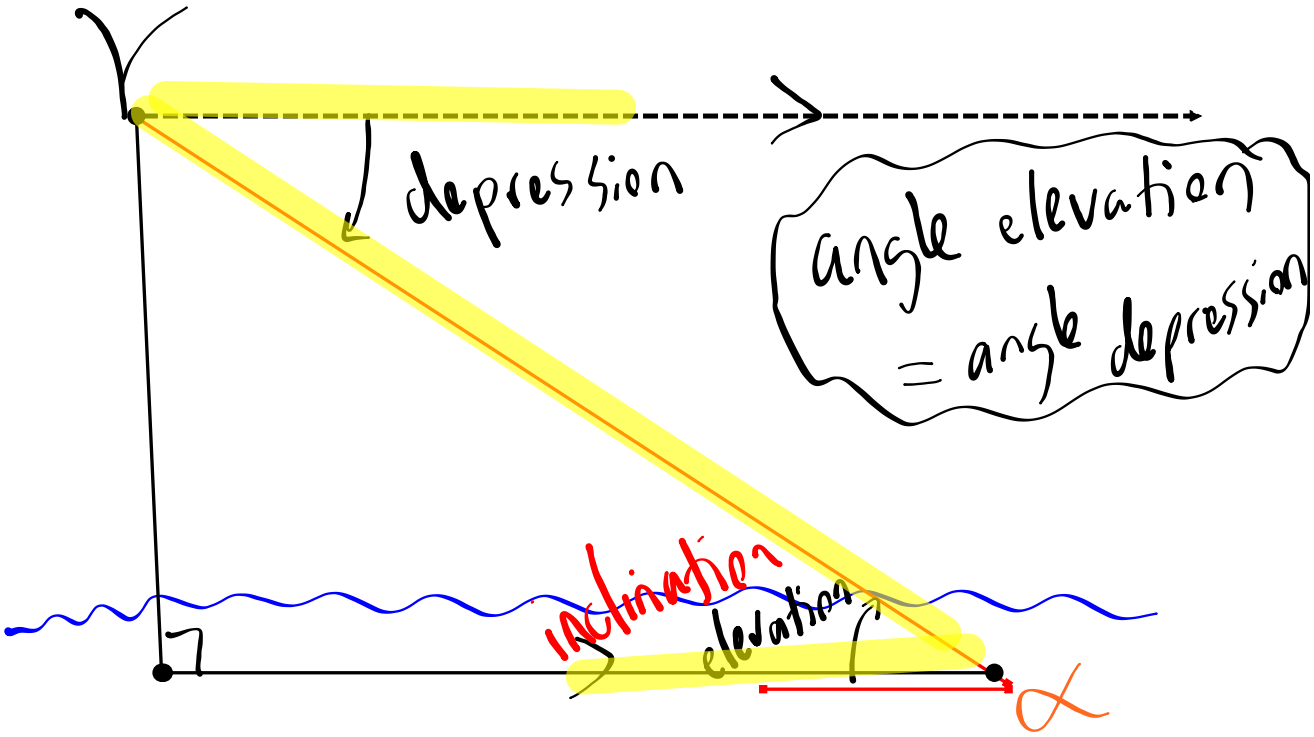
DRG

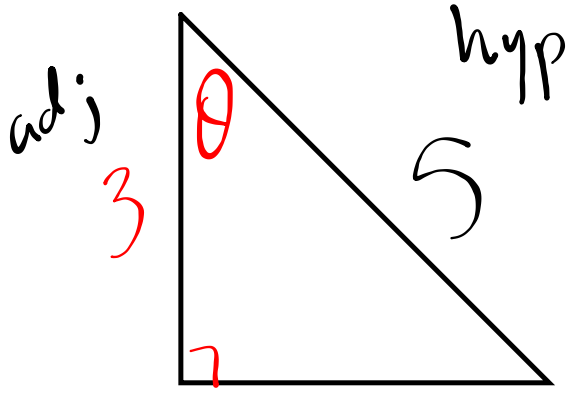
SOH CAH TOA

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

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

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


depression
angle elevation
= angle depression
inclination
elevation
α



SOH CAH TOA

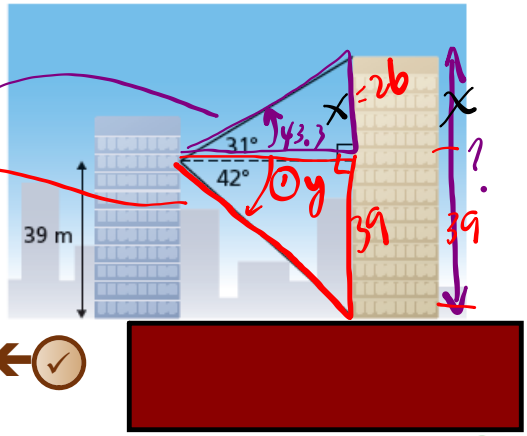
$\cos^{-1}\cos\theta = \cos^{-1}\frac{3}{5}$

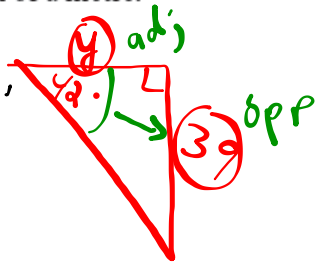
$\theta = \cos^{-1}\left(\frac{3}{5}\right)$

$\theta = 53^\circ$

YOUR TURN...

A surveyor stands at a window on the 9th floor of an office tower. He uses a clinometer to measure the angles of elevation and depression of the top and the base of a taller building. The surveyor sketches this plan of his measurements. Determine the height of the taller building to the nearest tenth of a metre.



① 

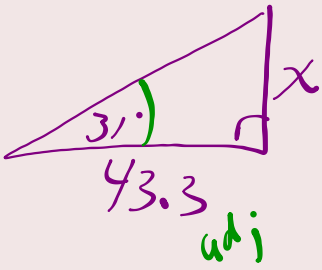
SOH CAH TOA

$y \tan 42^\circ = 39$

$\frac{y \tan 42^\circ}{\tan 42^\circ} = \frac{39}{\tan 42^\circ}$

$y = \frac{39}{\tan 42^\circ}$

$y = 43.3$

② 

$43.3 \tan 31^\circ = \frac{x}{43.3}$ (43.3)

$26.0 = x$

③ $h = 39 + 26$

$h = 65 \text{ m}$

HOMEWORK... 10.7 #2, 3, 4, 5, 6, 11ab

Booklet Exercise 10.8: #1 - 6