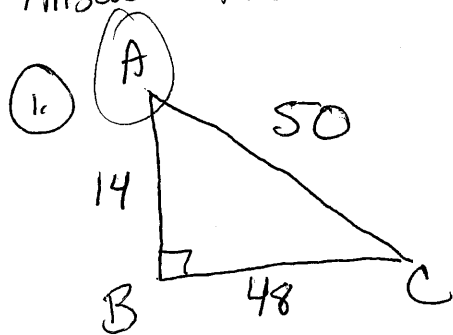


# Quiz Review (H.W)

Name: Key

Answer the Following Questions.



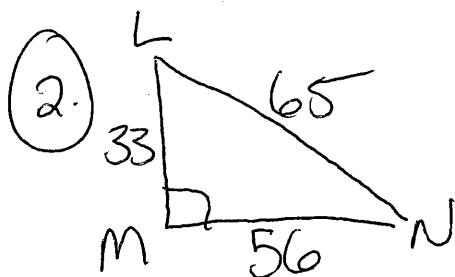
$$\tan A = \frac{48}{14} = \frac{24}{7}$$

$$\tan C = \frac{14}{48} = \frac{7}{24}$$

$$\tan^{-1}\left(\frac{24}{7}\right) =$$

$$\angle A = 73.7^\circ$$

$$\angle C = 16.3^\circ$$



$$\tan L = \frac{56}{33} =$$

$$\tan N = \frac{33}{56} =$$

$$\tan^{-1}\left(\frac{56}{33}\right)$$

$$\angle L = 59.5^\circ$$

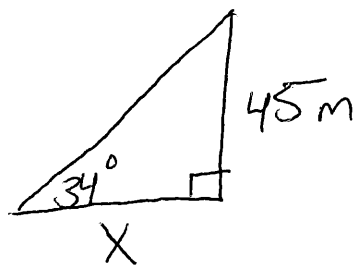
$$\angle N = 30.5^\circ$$



$$20(\tan 27) = \left(\frac{X}{20}\right) 20$$

$$X = 20 \tan 27 = 10.2m$$

4.

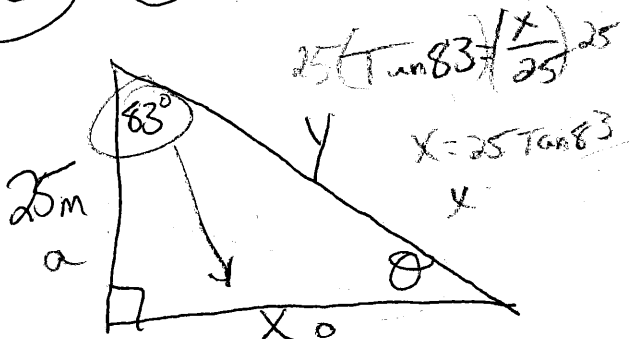


$$\tan 34 = \frac{45}{X}$$

$$X = 66.7m$$

$$\frac{45}{\tan 34} = \frac{X \tan 34}{\tan 34}$$

5. Solve for the missing sides +  $\angle$ 's.



$$25(\tan 83) = \left(\frac{X}{25}\right) 25$$

$$X = 25 \tan 83$$

$$\theta = 17^\circ$$

$$X = 203.6m$$

$$Y = 657.3m$$

$$25^2 + 203.6^2 = Y^2$$

$$\sqrt{43207.96} = Y$$

6. Write an equation of a line through  $(-5, 6)$  +  $(-15, -1)$

$$\frac{y_2 - y_1}{x_2 - x_1}$$

$$\frac{-1 - 6}{-15 - (-5)} \left( \frac{-7}{10} = m \right)$$

$$6 = -\frac{7}{10}(-5) + b$$

$$6 = -\frac{7}{2} + b$$

$$+ \frac{7}{2} \quad + \frac{7}{2}$$

$$9.5 = b$$

$$y = -\frac{7}{10}x + 9.5$$

7. Write an equation of a line through  $(5, -3)$   $\parallel$  to  $y = -\frac{1}{3}x + 20$

Same Slope

$$m = -\frac{1}{3}$$

$$-3 = -\frac{1}{3}(5) + b$$

$$-3 = -\frac{5}{3} + b$$

$$+ \frac{5}{3} \quad + \frac{5}{3}$$

$$b = -\frac{4}{3}$$

$$y = -\frac{1}{3}x - \frac{4}{3}$$

$(-1, 3)$

8. Write an equation of a line through  $(-7, -4)$   $\perp$  to  $y = 5x - 40$

$$m = -\frac{1}{5}$$

$$-4 = -\frac{1}{5}(-7) + b$$

$$-4 = \frac{7}{5} + b$$

$$- \frac{7}{5} \quad - \frac{7}{5}$$

$$b = -\frac{27}{5}$$

$$y = -\frac{1}{5}x - \frac{27}{5}$$

$(5, 4)$