

# TRIANGLE TRIG-PART 1-REVIEW

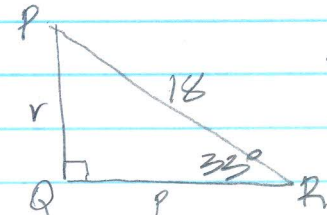
1) 0.4226    2) 0.4226    3) 0.3346    4) 1.3499

5) 0.9281    6) 0.1989    7) 1.0538    8) undefined

9)  $54.99^\circ$     10)  $10.00^\circ$     11)  $50.01^\circ$     12)  $44.92^\circ$

13)  $65^\circ 1'$     14)  $56^\circ 19'$     15)  $40^\circ 0'$     16)  $25^\circ 13'$

17)

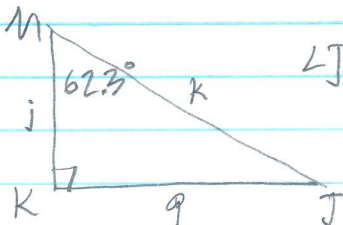


$\angle P = 57^\circ$      $\cos 33^\circ = \frac{p}{18}$      $\sin 33^\circ = \frac{r}{18}$

$p = 18 \cos 33^\circ$      $r = 18 \sin 33^\circ$

$p = 15.1$      $r = 9.8$

18)

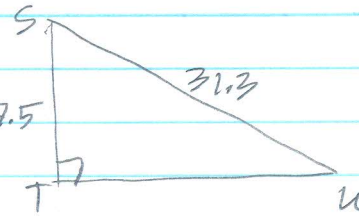


$\angle J = 27.7^\circ$      $\tan 62.3^\circ = \frac{9}{j}$      $\sin 62.3^\circ = \frac{9}{k}$

$j = \frac{9}{\tan 62.3^\circ}$      $k = \frac{9}{\sin 62.3^\circ}$

$j = 4.7$      $k = 10.2$

19)

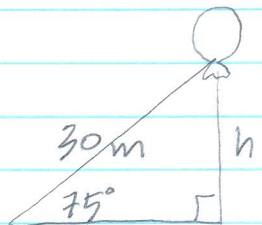


$\sqrt{31.3^2 - 7.5^2}$      $\sin u = \frac{7.5}{31.3}$      $\cos s = \frac{7.5}{31.3}$

$s = 30.4$      $u = \sin^{-1}\left(\frac{7.5}{31.3}\right)$      $s = \cos^{-1}\left(\frac{7.5}{31.3}\right)$

$u = 13.9^\circ$      $s = 76.1^\circ$

20)

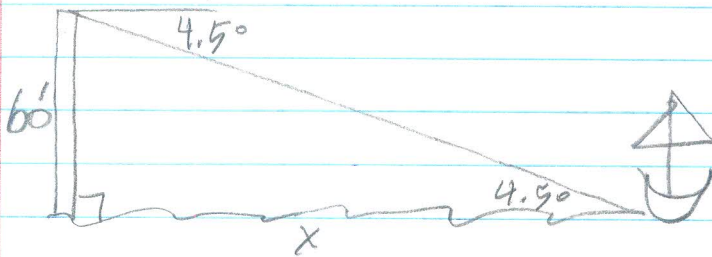


$\sin 75^\circ = \frac{h}{30}$

$h = 30 \sin 75^\circ$

$h = 29.0 \text{ m}$

21)

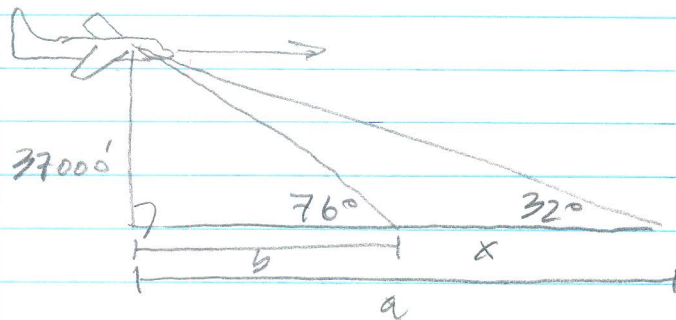


$$\tan 4.5^\circ = \frac{60}{x}$$

$$x = \frac{60}{\tan 4.5^\circ}$$

$$x = \underline{\underline{762.4 \text{ ft.}}}$$

22)



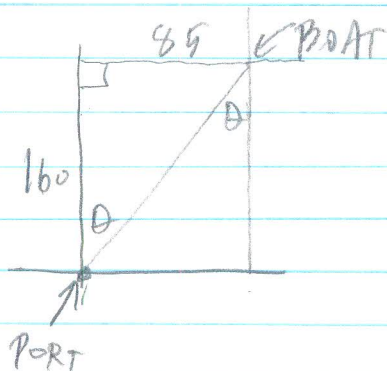
$$\tan 32^\circ = \frac{37000}{a}$$

$$a = \frac{37000}{\tan 32^\circ}$$

$$b = \frac{37000}{\tan 76^\circ}$$

$$x = a - b = \underline{\underline{49987.2 \text{ feet}}}$$

23)



$$\tan \theta = \frac{85}{160}$$

$$\theta = \tan^{-1} \left( \frac{85}{160} \right)$$

$$\theta = 28.0^\circ$$

$$\underline{\underline{S 28^\circ W}}$$