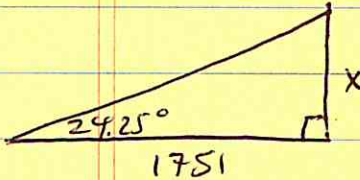


T/PC
Ch 4
Sec 4.74.8 Review

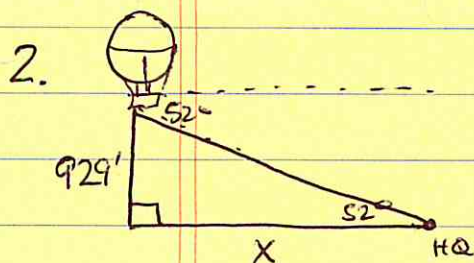
1.  $24^\circ 15' = 24 + \frac{15}{60} = 24.25$
 $\tan 24.25^\circ = \frac{x}{1751}$

$$x = 1751(\tan 24.25)$$

$$x \approx 789 \text{ ft}$$

our usual rounding

answer 788.768 ft

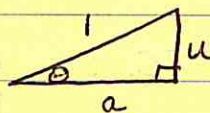


$$\frac{\tan 52^\circ}{1} = \frac{929}{x}$$

$$x = \frac{929}{\tan 52^\circ}$$

$$x \approx 726 \text{ ft} \quad (\text{usual rounding} \rightarrow 725.814 \text{ ft})$$

3. $\tan(\sin^{-1} u)$



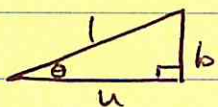
$$a^2 + u^2 = 1^2$$

$$a^2 = 1 - u^2$$

$$a = \sqrt{1 - u^2}$$

$$\tan \theta = \frac{u}{\sqrt{1 - u^2}}$$

4. $\sin(\cos^{-1} u)$



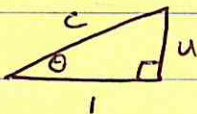
$$b^2 + u^2 = 1^2$$

$$b^2 = 1 - u^2$$

$$b = \sqrt{1 - u^2}$$

$$\sin \theta = \frac{\sqrt{1 - u^2}}{1} = \sqrt{1 - u^2}$$

5. $\cos(\tan^{-1} u)$

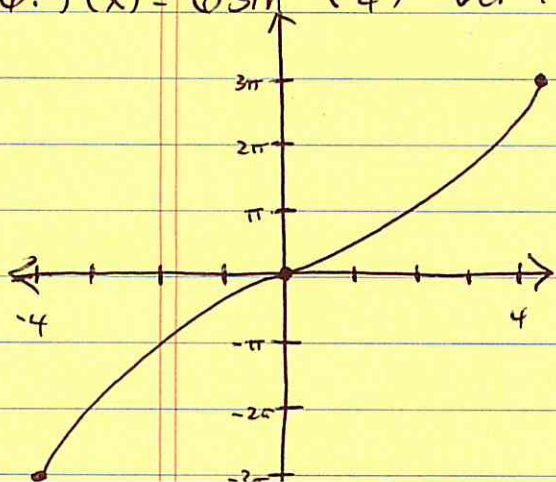


$$c^2 = 1^2 + u^2$$

$$c = \sqrt{u^2 + 1}$$

$$\cos \theta = \frac{1}{\sqrt{u^2 + 1}}$$

6. $f(x) = 6 \sin^{-1}(\frac{x}{4})$ Vertical stretch of 6, horizontal stretch of 4



$$D[-4, 4] \quad R[-3\pi, 3\pi]$$