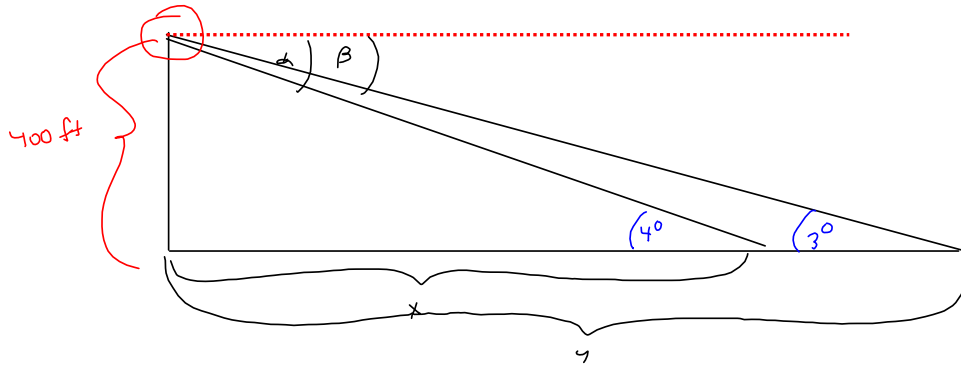


Questions about anything?



$\beta = 3^\circ$, $\alpha = 4^\circ$, How far apart are the ships?



x = distance from lighthouse to closer ship (in feet)
 y = " " " " " farther " (" ")

We want $y - x$ = distance between them.

~~$\frac{y}{400} = \tan(4^\circ) \Rightarrow y = 400 \tan(4^\circ)$~~
 ~~$\frac{x}{400} = \tan(3^\circ) \Rightarrow x = 400 \tan(3^\circ)$~~

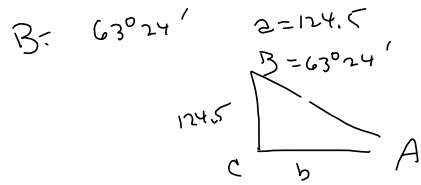
Jocelyn says I got tangent upside-down!
 It's $\frac{y}{x} = \frac{OPP}{ADJ}$, not $\frac{x}{y} = \frac{ADJ}{OPP}$

$\frac{400}{y} = \tan(4^\circ) \Rightarrow x = \frac{400}{\tan(4^\circ)} \approx 5720.266503 \text{ ft}$

... $y = \frac{400}{\tan 3^\circ} \approx 7632.454675 \text{ ft}$

$\Rightarrow y - x \approx 1912.188172 \text{ ft}$

<code>30/tan(3</code>	<code>= y</code>
<code>7632.454675</code>	
<code>30/tan(4)</code>	<code>= x</code>
<code>5720.266503</code>	
<code>30-400/tan(3)</code>	<code>= x-y</code>
<code>-1912.188172</code>	



15.8 #11

$$63^\circ 24'$$

$$= 63^\circ + \left(\frac{24}{60}\right)^\circ$$

$$90^\circ - \left(63 + \frac{24}{60}\right)^\circ$$

$$26^\circ + .6^\circ$$

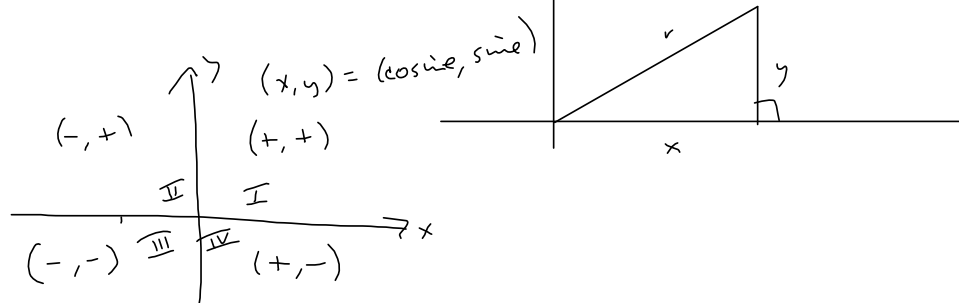
$$= 26^\circ + (.6^\circ) \left(\frac{60'}{1^\circ}\right)$$

$$= 26^\circ + 36' = 26^\circ 36'$$

90-63-24/60	1
Ans-26	26.6
Ans*60	.6
■	36

$$\text{Sine} = \frac{y}{r} \quad \text{"y"s}$$

$$\text{cosine} = \frac{x}{r} \quad \text{"x"s}$$



Even/Odd $\leftarrow \rightarrow + / -$

$$\frac{x}{x^2+4} \text{ @ } 5$$

$$\frac{-}{+} = - \quad \text{odd}$$

$$\left(\frac{\sin(x)}{\cos^2(x) + \tan^2(x)} \right) \left(\frac{\cos(x)}{x+x^3} \right) = \frac{(-)(+)}{(+)(-)} = +$$

$$\text{"(+ + +)"} = +$$