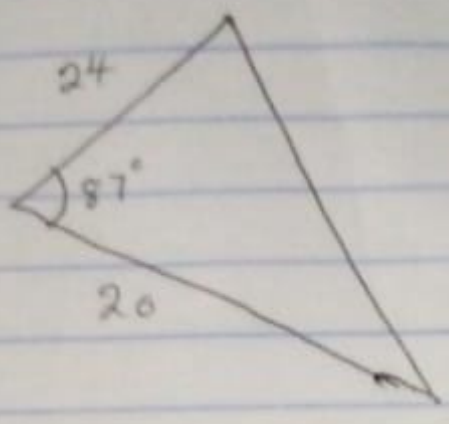


Sin.

$$\text{Area} = \frac{ab\sin c}{2}$$

$$= \frac{24 \cdot 26 \cdot \sin 87}{2}$$

$$= \frac{623.1448}{2}$$

$$= 311.5724 \text{ feet}^2$$

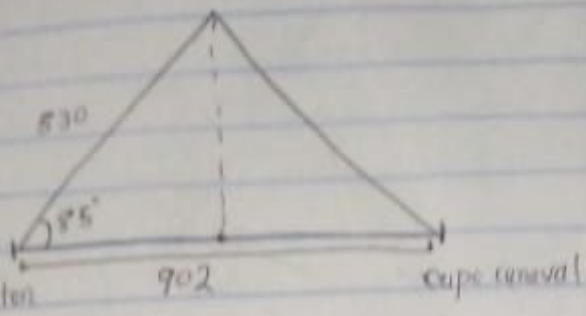
$1 \text{ foot}^2 = \$35$

$311.5724?$

$$311.5724 \text{ feet}^2 \times \frac{\$35}{1 \text{ foot}^2}$$

$$= \$10,905.034$$

Question 2



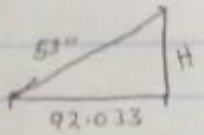
Sln.

$\cos 80 = \frac{add}{Hyp}$

$\cos 80 = \frac{add}{530}$

$add = 530 \cdot \cos 80$

$= 92.033$



To get H.

$H^2 = 530^2 - 92.0335^2$

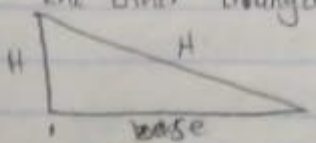
$= 280,900 - 8470.1651$

$\sqrt{H^2} = \sqrt{280,900 - 8470.1651}$

$\sqrt{H^2} = \sqrt{272,429.8349}$

$H = 521.9481$

To get the other triangle



$base = 902 - 92.0335$

$= 809.9665$

Distance from cape town to Distance from satellite to cape canavel.

$Hyp^2 = box^2 + Height^2$

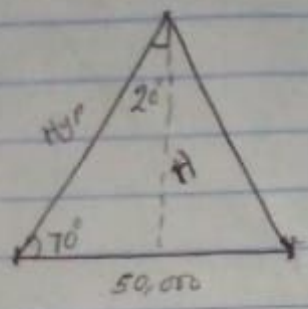
$= 809.9665^2 + 521.9481^2$

$\sqrt{Hyp^2} = \sqrt{928,475,5502}$

$= 963.5744$ (4sg)

Distance = 963.5744 miles

QUESTION 1



Sin

$\sin 20 = \frac{opp}{Hyp}$

$opp = \frac{50,000}{2} = 25,000$

$\sin 20 = \frac{25,000}{Hyp}$

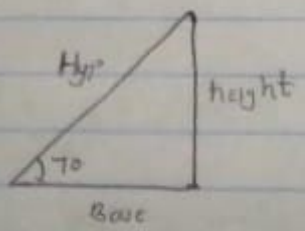
$\frac{\sin 20}{\sin 20} Hyp = \frac{25,000}{\sin 20}$

$Hyp = \frac{25,000}{0.3420}$

$= 73,095.11$

Height

$Base^2 + height^2 = Hypotenuse^2$



$25000^2 + h^2 = 73,095.11^2$

$h^2 = 73,095.11^2 - 25,000^2$

$\sqrt{h^2} = \sqrt{4717,895,106}$

$h = 68,686.9354$ (4 sf)

$\sin 65° = \frac{opp}{Hyp}$

$\sin 65° = \frac{68,686.9354}{Hyp}$

$Hyp = \frac{68,686.9354}{\sin 65°}$

$= \frac{68,686.9354}{0.9063}$

$Hyp = 75,788.2990$ (4 sf)

Dutance = 75788.2990 feets