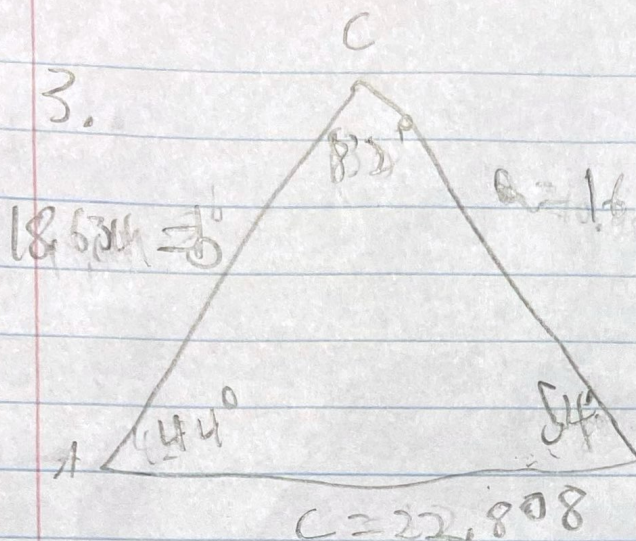


# LOS HW 7.1

John Vaughan



$$\frac{16}{\sin 44^\circ} = \frac{b}{\sin 54^\circ}$$

$$b = \frac{16 \sin 54^\circ}{\sin 44^\circ}$$

$$b = 18.634$$

$$\frac{16}{\sin 44^\circ} = \frac{c}{\sin 82^\circ}$$

$$c = \frac{16 \sin 82^\circ}{\sin 44^\circ}$$

$$c = 22.808$$

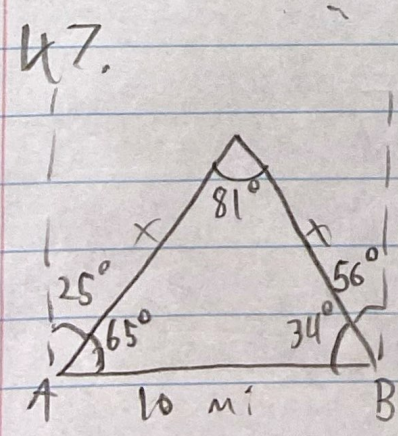
$A = 42^\circ$   
 $B = 48^\circ$   
 $C = 100^\circ$   
 $a = 10.481$   
 $b = 12$

35.  $B = A = 50^\circ$   
 $B = 36^\circ$   
 $C = 108^\circ$   
 $a = 3$   
 $b = 3$   
 $c = 6$

$$A = \frac{1}{2} ab \sin C$$

$$A = \frac{1}{2} (3)(3) \sin 108^\circ$$

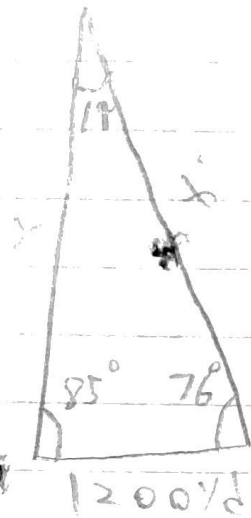
$$= 5.290^2 \text{ yd}$$



$$\frac{10}{\sin 81^\circ} = \frac{b}{\sin 34^\circ} = b = \frac{10 \sin 34^\circ}{\sin 81^\circ} = 5.661 \text{ miles}$$

$$\frac{10}{\sin 81^\circ} = \frac{a}{\sin 65^\circ} = a = \frac{10 \sin 65^\circ}{\sin 81^\circ} = 9.176 \text{ miles}$$

49.



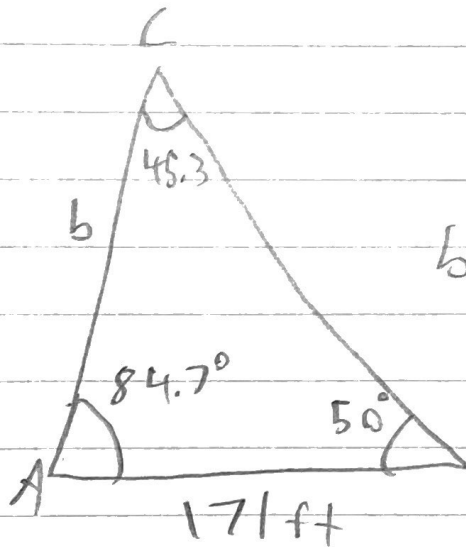
$$\frac{1200}{\sin 19} = \frac{b}{\sin 85}$$

$$b = \frac{1200 \sin 85}{\sin 19} = 3671.838 \text{ yd}$$

$$\frac{1200}{\sin 19} = \frac{a}{\sin 76}$$

$$a = \frac{1200 \sin 76}{\sin 19} = 3576.378 \text{ yd}$$

51.

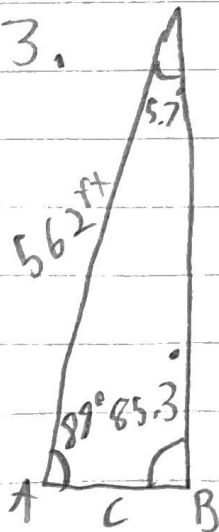


$$\frac{171}{\sin 45.3} = \frac{b}{\sin 50}$$

$$b = \frac{171 \sin 50}{\sin 45.3}$$

$$b = 184.290 \text{ ft}$$

53.



$$\frac{562}{\sin 85.3} = \frac{c}{\sin 5.7}$$

$$c = \frac{562 \sin 5.7}{\sin 85.3}$$

$$= 56.006$$

HW #1 2

17  
17

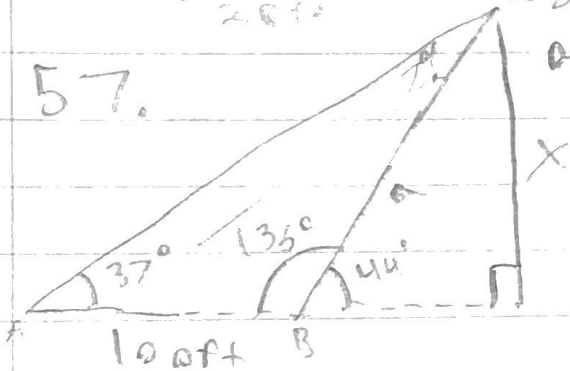


$$\frac{20}{\sin 36^\circ} = \frac{x}{\sin 52^\circ}$$

$$x = \frac{20 \sin 52^\circ}{\sin 36^\circ}$$

$$= 20.04 \text{ ft}$$

57.



$$\frac{100}{\sin 7^\circ} = \frac{a}{\sin 37^\circ}$$

$$a = \frac{100 \sin 37^\circ}{\sin 7^\circ}$$

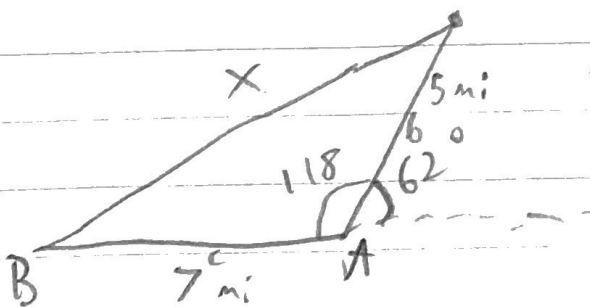
$$a = 493.819 \text{ ft}$$

$$b. \frac{493.819 \text{ ft}}{\sin 90^\circ} = \frac{h}{\sin 44^\circ}$$

$$h = \frac{493.819 \sin 44^\circ}{\sin 90^\circ}$$

$$= 343.035 \text{ ft}$$

59.



$$a = \frac{1}{2} (6) (7) \sin 118$$

$$18.541 \text{ mi}$$