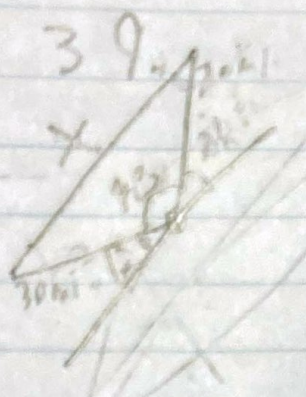


7.2 HW Pt 1

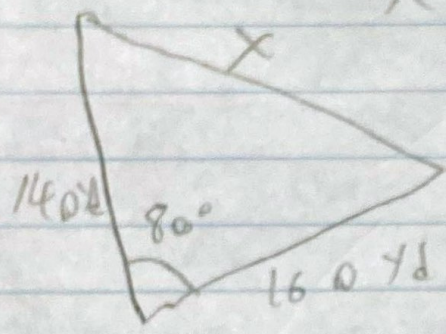


$$x^2 = 30^2 + 30^2 - 2(30)(30)\cos 93^\circ$$

$$x^2 = 1228.628$$

$$x = 35.051 \text{ m}$$

41.

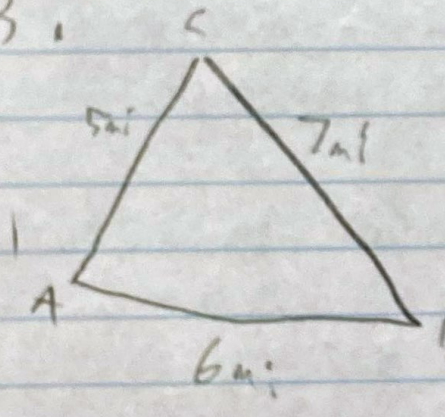


$$x^2 = 140^2 + 160^2 - 2(140)(160)\cos 80^\circ$$

$$x^2 = 50145.348$$

$$x = 223.931 \text{ yd}$$

43.



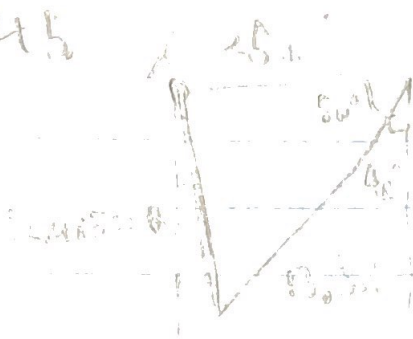
$$s = \frac{1}{2}(5)(7)(6)$$

$$s = 105$$

$$A = \sqrt{105(105-5)(105-7)(105-6)}$$

$$A = 10093.1647$$

45



$$a^2 = 25^2 + 13.5^2 - 2(25)(13.5) \cos 50^\circ$$

$$a^2 = 155.887$$

$$a = 12.485$$

$$b = 13.5^2 = 25^2 + 12.485^2 - 2(25)(12.485) \cos X$$

$$13.5^2 = 25^2 + 12.485^2 - 2(25)(12.485) \cos X$$

$$\arccos \left(\frac{13.5^2 - 25^2 - 12.485^2}{-2(25)(12.485)} \right) = X$$

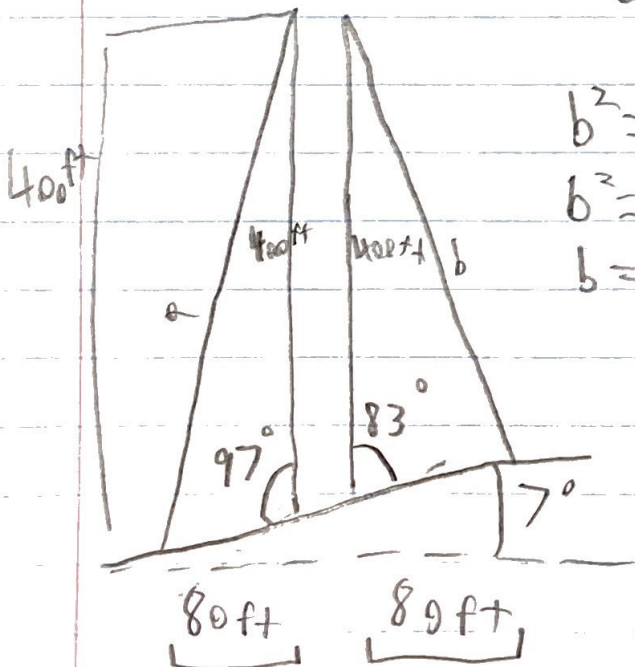
$$16.473^\circ$$

47.

$$a^2 = 400^2 + 80^2 - 2(400)(80) \cos 97^\circ$$

$$a^2 = 225609.442$$

$$a = 474.983$$



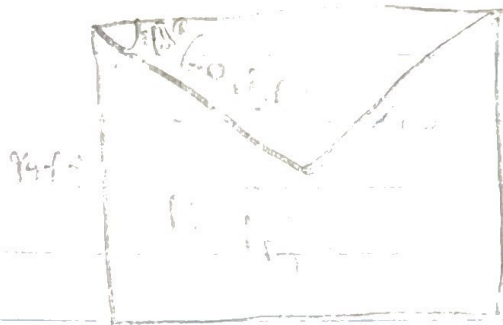
$$b^2 = 400^2 + 80^2 - 2(400)(80) \cos 83^\circ$$

$$b^2 = 150429.432$$

$$b = 387.852$$

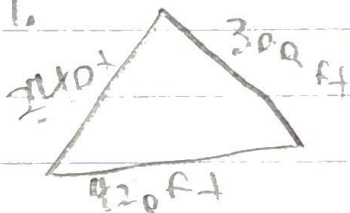
12 11 11 11

11 9, 11 9, 11 9, 11 9



$C = 60.5 + 90 - 2(90) = 105.5$
 $r = 110.590857$
 $C = 63.717 ft$

51.



$$S = \frac{1}{2}(240 + 300 + 420)$$

$$S = 480$$

$$A = \sqrt{480(480 - 240)(480 - 300)(480 - 420)}$$

$$A = 35272.652$$

$$35272.652 \cdot \$3.50$$

$$\$123454.283$$