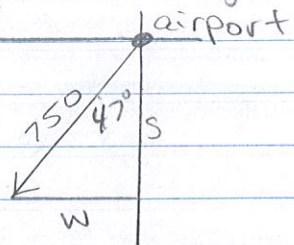


Right Triangle Trig wsl #16-20

16.



$$375(2) = 750$$

$$\sin 47^\circ = \frac{W}{750}$$

$$750 \sin 47^\circ = W$$

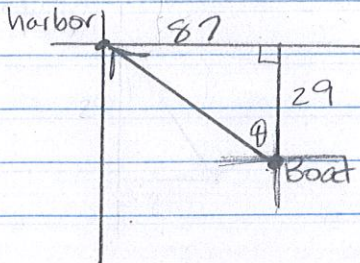
$$W = 548.5 \text{ miles}$$

$$\cos 47^\circ = \frac{S}{750}$$

$$750 \cos 47^\circ = S$$

$$S = 511.5 \text{ miles}$$

17.



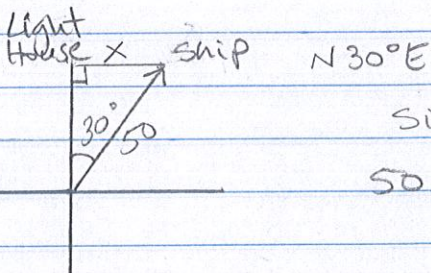
$$\tan \theta = \frac{87}{29}$$

$$\theta = \tan^{-1} \frac{87}{29}$$

$$\theta = 71.6^\circ$$

$$N 71.6^\circ W$$

18.

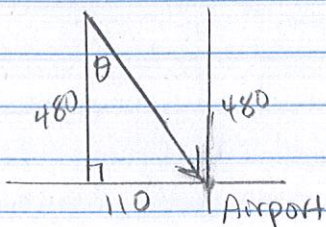


$$\sin 30^\circ = \frac{x}{50}$$

$$50 \sin 30^\circ = x$$

$$x = 25 \text{ miles}$$

19.



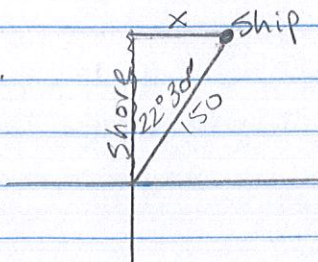
$$\tan \theta = \frac{110}{480}$$

$$\theta = \tan^{-1} \frac{110}{480}$$

$$\theta = 12.9^\circ$$

$$S 12.9^\circ E$$

20.



$$\sin 22^\circ 30' = \frac{x}{150}$$

$$150 \sin 22^\circ 30' = x$$

$$x = 57.4 \text{ mi}$$