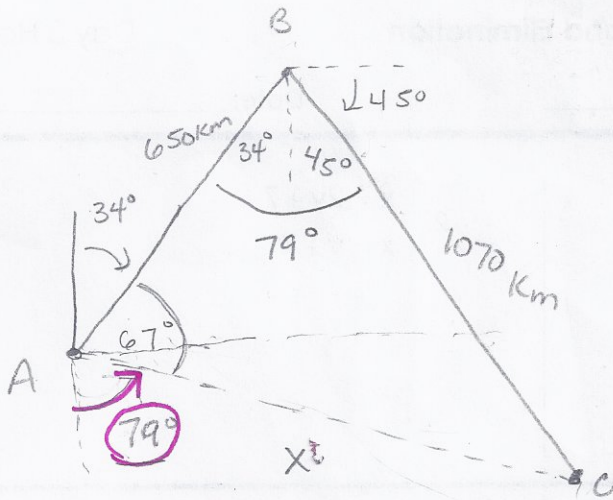


10.



$$\frac{\sin A}{1070} = \frac{\sin 79^\circ}{1141.05}$$

$$A \approx 67^\circ$$

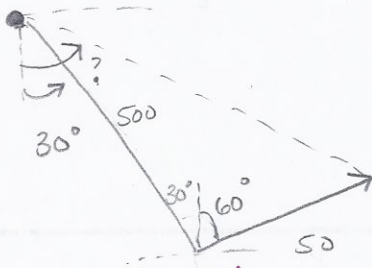
Write it as a bearing

$$\boxed{S 79^\circ E}$$

$$x^2 = 650^2 + 1070^2 - 2(650)(1070) \cos 79^\circ$$

$$\boxed{x \approx 1141.05 \text{ km}}$$

11.



$$x^2 = 500^2 + 500^2 - 2(500)(500) \cos 90^\circ$$

$$\boxed{x = 502.5 \text{ km/hr}}$$

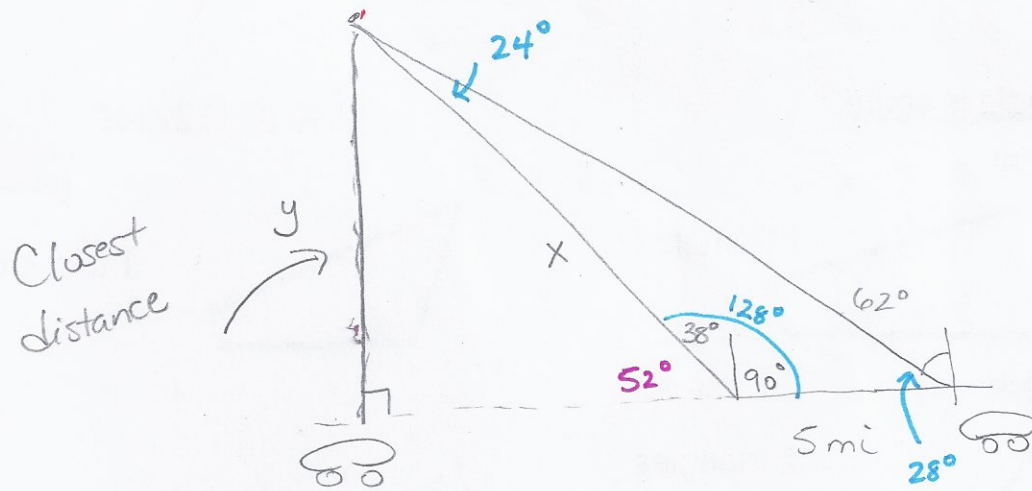
← since this is 90°
you could use
soh-cah-toa

$$\frac{\sin A}{50} = \frac{\sin 90^\circ}{502.5}$$

$$A = 5.71^\circ$$

$$\text{So } \boxed{S 35.71^\circ E}$$

12.

I want to know y .

$$\frac{x}{\sin 28^\circ} = \frac{5}{\sin 24^\circ}$$

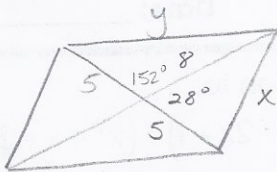
$$x = 5.8$$

Since 90° use soh-cah-toa

$$\sin 52^\circ = \frac{y}{5.8}$$

$$y = 4.57 \text{ miles}$$

13.



diagonals bisect each other in a parallelogram

$$x^2 = 8^2 + 5^2 - 2(8)(5) \cos 28^\circ$$

$$x = 4.3 \text{ ft}$$

$$y^2 = 5^2 + 8^2 - 2(5)(8) \cos 152^\circ$$

$$y = 12.6 \text{ ft}$$