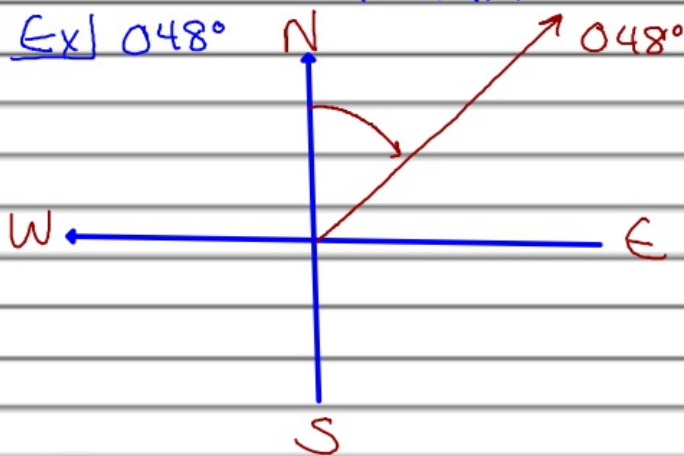


Questions:

Notes:

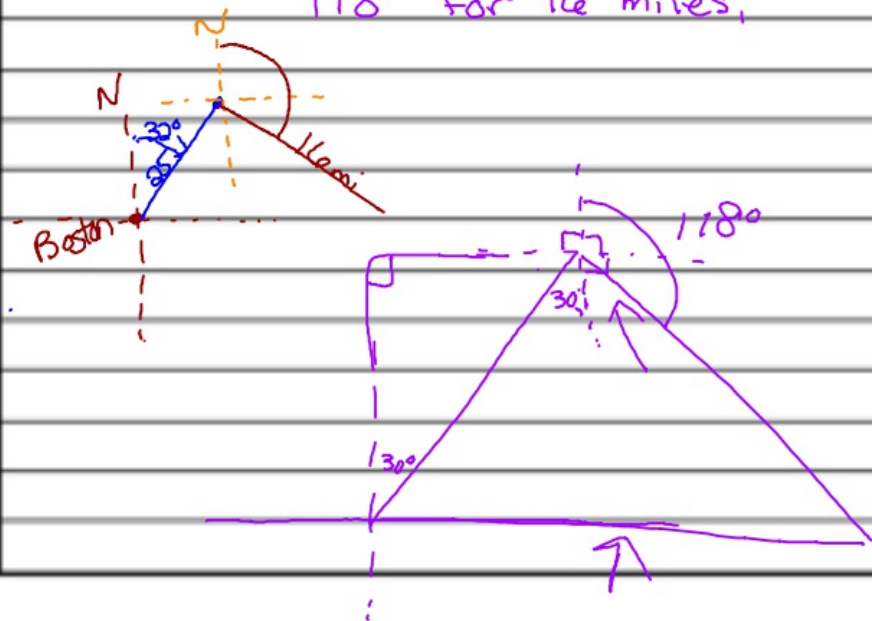
## Bearings

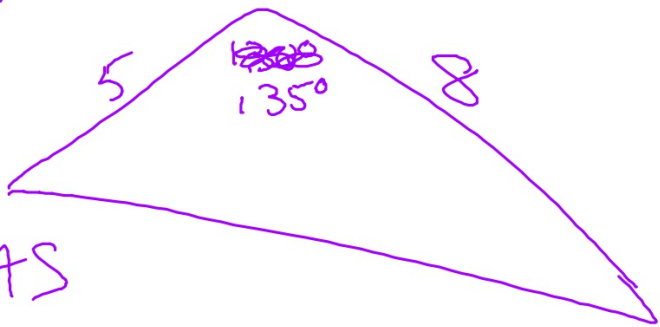
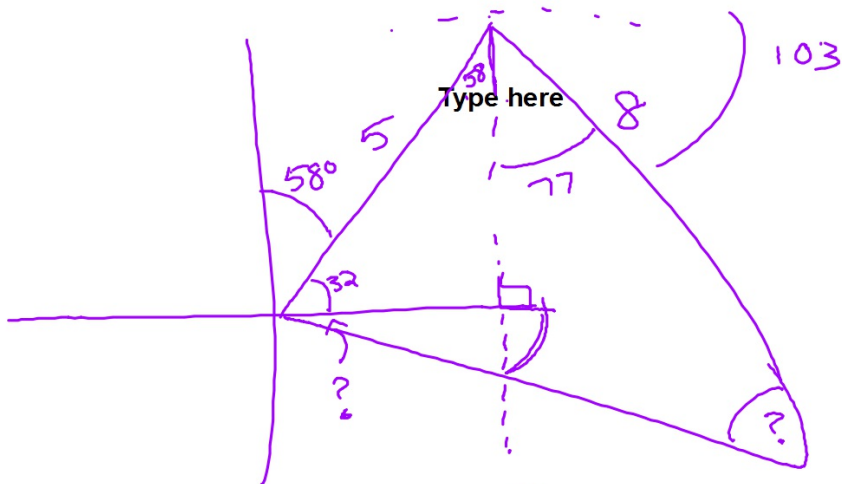
- 3 digit degrees -  
measured clockwise from  
North



If journey involves changes of bearing; "start over" at each turn

Ex) Fred left Boston  
on a bearing of  $032^\circ$ .  
After traveling 25 mi  
he headed on a bearing of  
 $118^\circ$  for 16 miles,





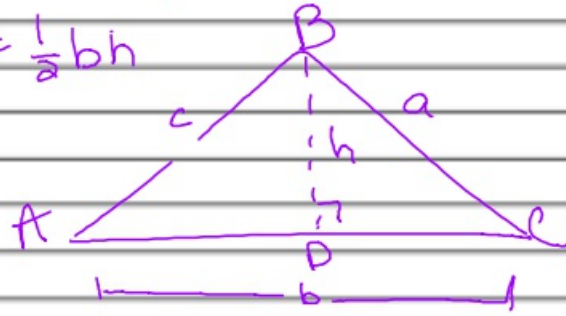
SAS

Questions:

Notes:

Area of a triangle:

$$A = \frac{1}{2}bh$$

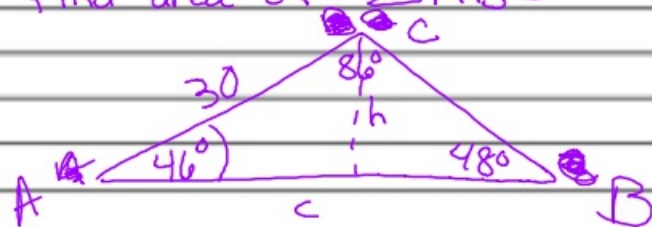


$$\sin A = \frac{h}{c} \Rightarrow h = c \sin A$$

Substitute  $h$  in  $A = \frac{1}{2}bh$

$$A = \frac{1}{2}bc \sin A$$

Ex find area of  $\triangle ABC$



1st - find side opposite  $86^\circ$

$$\frac{\sin 86^\circ}{c} = \frac{\sin 48^\circ}{30}$$

$$c \sin 48^\circ = 30 \sin 86^\circ$$

$$c = \frac{30 \sin 86^\circ}{\sin 48^\circ}$$

$$c \approx 40,3$$

$$A = \frac{1}{2}(30)(40,3) \sin 46^\circ$$

$$A = 435 \text{ cm}^2$$