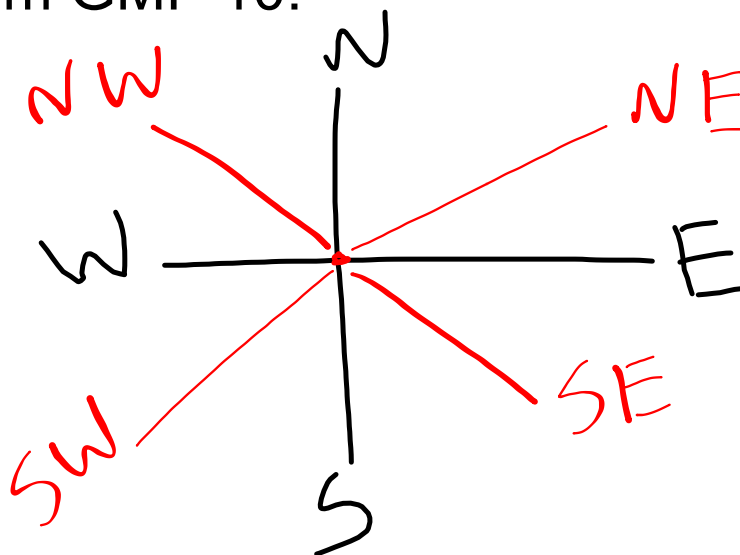


Bearings

Mar. 13, 2020

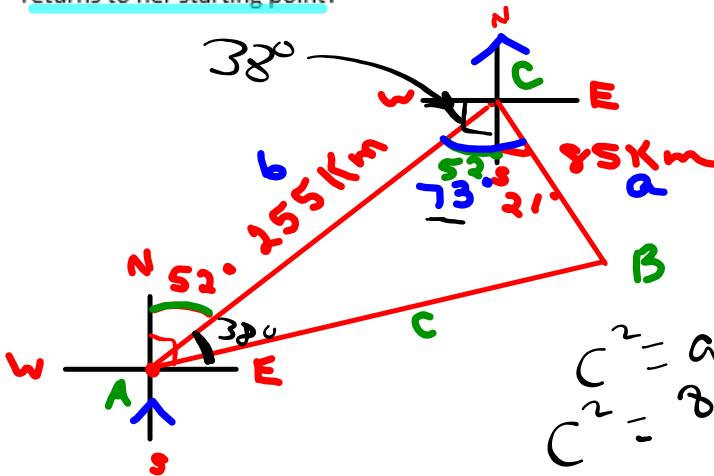
review from GMF 10:



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Example 3: Solving a Problem Using the Cosine Law

A pilot delivers supplies to a remote camp by flying 255 km in the direction $N52^\circ E$. While at the camp, the pilot receives a radio message to pick up a passenger at a village before returning home. The village is 85 km $S21^\circ E$ from the camp. What is the total distance, to the nearest kilometer, that the pilot will have flown by the time she returns to her starting point?



$$c^2 = a^2 + b^2 - 2ab \cos C$$

$$c^2 = 85^2 + 255^2 - 2(85)(255) \cos 73^\circ$$

$$c^2 = 72250 - 12674.3$$

$$c^2 = 59575$$

$$c = 244 \text{ km}$$

Total Distance:
 $255 + 85 + 244$
 $= 584 \text{ km}$

Practice questions:

Pg 138 #9

Pg 147 #3

Pg 152 #3

Pg 154 #12