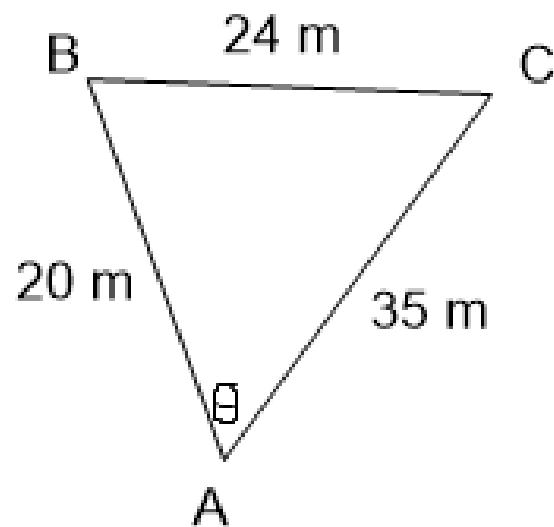
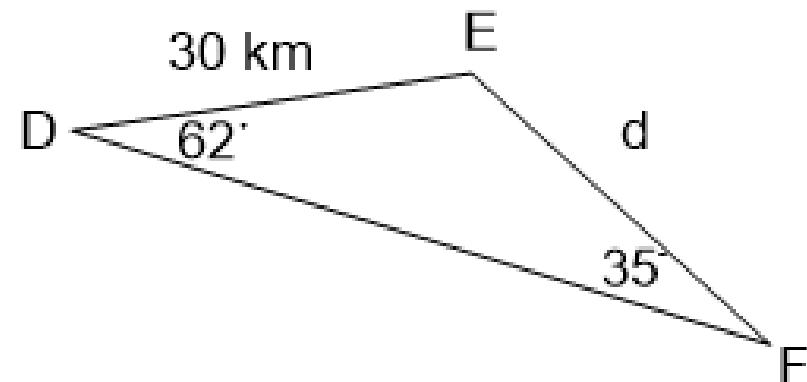


Chapter 3 Review

Would you use the sine law or the cosine law to determine each indicated side or angle measure? Explain.

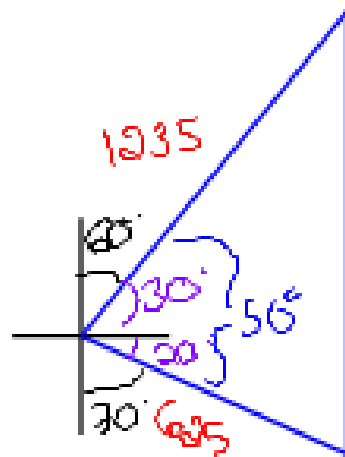


3 sides and looking for an angle =>
COSINE LAW



Sides and corresponding
angles => SINE LAW

Abby walks 1235 m at a bearing of N60E from the back door at her school.
 Hailey walks 625m at a bearing of S70E from the same door.
 How far apart are the girls?



$$x^2 = \underbrace{(625)^2} + \underbrace{(1235)^2} - \underbrace{2(625)(1235)\cos 50}$$

$$x^2 = 390625 + 1525225 - 998303.3725$$

$$x^2 = 923546.6275$$

$$x = 961 \text{ m}$$

$$\rightarrow 45 \text{ min} = 0.75 \text{ h}$$

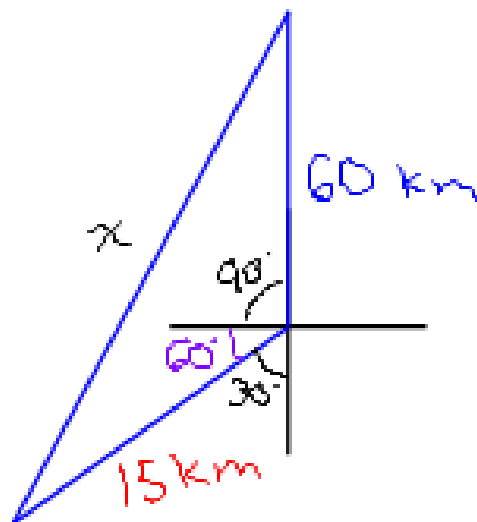
Car A travels North for 45 minutes at 80 km/h from an intersection. $\rightarrow 0.25 \text{ h}$

Car B left the intersection at the same time and travels S30W for 15 minutes at 60 km/h.

How far apart are the 2 cars?

$$d = v \cdot t = (80)(0.75) = 60 \text{ km}$$

$$d = v \cdot t = (60)(0.25) = 15 \text{ km}$$



$$x^2 = 60^2 + 15^2 - 2(15)(60)\cos 150$$

$$x^2 = 3600 + 225 - (-1558.8457)$$

$$x^2 = 5383.8457$$

$$x = 73 \text{ km}$$

Do Self Test p.152
Chapter Review p.154