

Review Cosine Law:

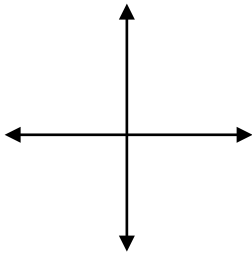
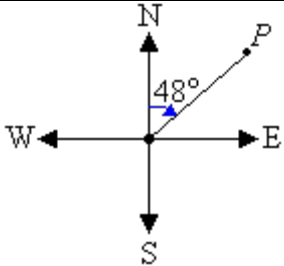
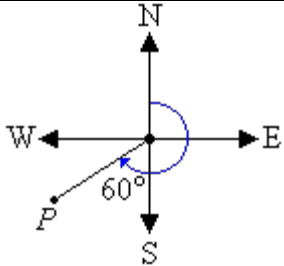
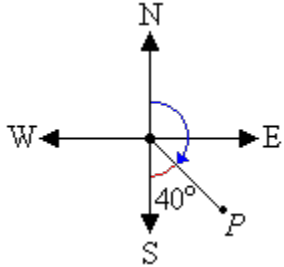
The Cosine Law can be used to solve for an unknown side, if you are given two sides and a contained angle:

$$a^2 = b^2 + c^2 - 2bc \cos A$$

It can also be re-arranged to solve for an unknown angle:

$$\cos A = \frac{b^2 + c^2 - a^2}{2bc}$$

Bearings: Direction can be written in several ways

Direction		bearing		Diagram	
N60°E		060°			
Diagram	Bearing	Direction	Diagram	Bearing	Direction
					
			Provide a sketch here.	235°	

1. A harbour master uses radar to monitor two ships. B and C, as they approach the harbour, H. One ship is 5.3 miles from the harbour on a bearing of 032° . The other ship is 7.4 miles away from the harbour on a bearing of 295° . How far apart are the two ships?

2. An aircraft navigator knows that town A is 71 km due north of the airport, town B is 201 km from the airport, and towns A and B are 241 km apart. On what bearing should she plan the course from the airport to town B?