Efofex Teacher Resource Project

Showing the world what we can do, in the most useful way possible.

Bearings

How Can I Use This Material?

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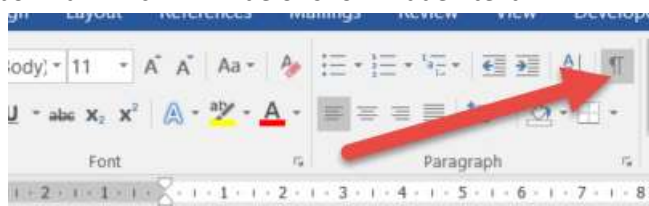
A full Acceptable Use FAQ is available on our website (Acceptable Use FAQ).

How Do I Use The Videos?

1. Copy the link into your web browser.
2. Left clicks have a quiet click sound.
3. Right clicks have a loud click sound.

Where Are The Solutions?

Solutions are only available in the Word docx format of the resources. Press this button on the Home Tab of the Ribbon Bar which will hide or show hidden text.

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Question

A ship leaves from Port A at 1pm and travels on a bearing of 189° at a constant 24km/h. At 9pm, the ship's engine suffers a major malfunction and from that time can only maintain a speed of 10km/h.

The ship needs to be repaired urgently and the ship's captain must decide whether to turn back to Port A or proceed on to Port B that is 260km, on a bearing of 148°, from Port A.
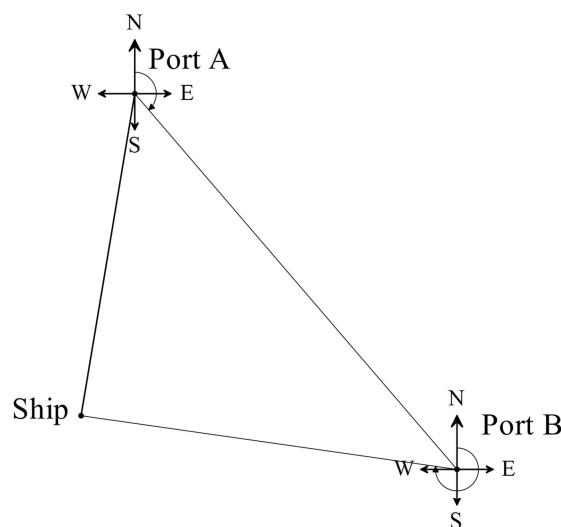
a) How far will the ship be away from Port A at 9pm?

b) If the captain decides to return to Port A, on what bearing must the ship travel?

c) The captain has calculated that Port B is closer to the ship than Port A and decides to proceed to Port B. On what bearing must the ship travel?

d) To the nearest minute, how much time will the captain save by sailing to Port B for repairs?

[1,1,7,3 = 12 Marks]

How We Drew The Diagram

http://www.youtube.com/v/AaoevNSqS8U&hd=1&autoplay=1

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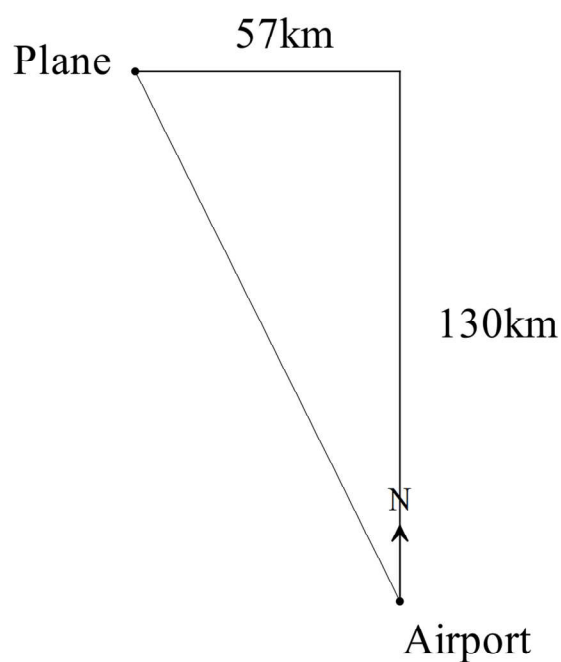## Question

A plane is 130km North and 57km West of an airport. The pilot wishes to fly directly to the airport.

a) How far from the airport is plane?
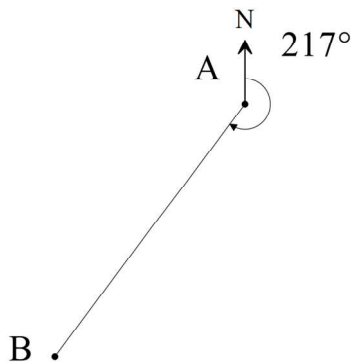b) What bearing should the pilot fly on to fly directly to the airport?

[2,3 = 5 Marks]

How We Drew The Diagram
http://www.youtube.com/v/QXtsG5YiD_Y&hd=1&autoplay=1

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Question

In each of these examples, find the bearing of A from B

a)

N

A   217°

B

b)

N   074°

B

A   72km

c)

N   142°

A

27km

N   037°

C

38km

B

[1,1,5 = 7 Marks]

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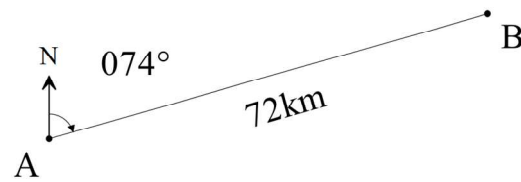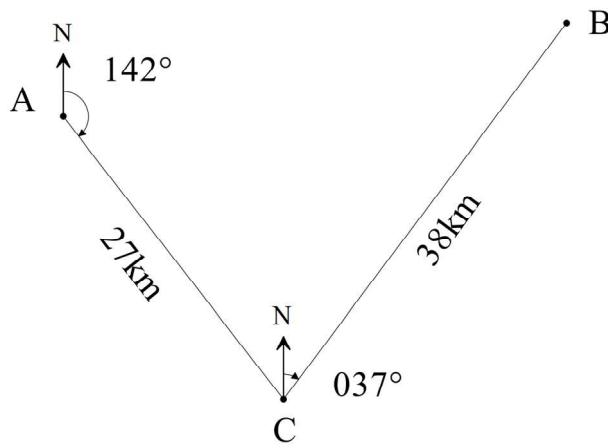
Question

Fire control officers have two fire observation towers in a forest that are used to detect forest fires. Tower B is 14km North West of Tower A. On a hot summer's day, the two towers observe a forest fire. Tower A reports that the fire is on a bearing of 012° and Tower B reports that the fire is on a bearing of 042°.

a)   Draw a diagram to represent this situation.

b)   How far is the fire from Tower A?

[2,4 = 6 Marks]

How We Drew The Diagram
http://www.youtube.com/v/MHKEoEGT1i0&hd=1&autoplay=1