

# Functional Skills

## Maths:

### Using angles when describing position and location

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# Training Overview

1. What is a bearing?
2. An example
3. Answering the question
4. The answer
5. What did the Chair of Examiners say about this question?



**What is a bearing?**

Using angles when describing position and location has been introduced to Level 1 Functional Skills maths as part of the reform. Pearson has taken this to mean bearings.

## **So what is a bearing?**

- A bearing is a way of measuring direction, it is often used by ships and the military.
- It is measured in degrees.
- It is measured from north.
- It is measured clockwise.
- It is always given in three figures.
- It is measured using a protractor.

**An example**

Ben is an activity leader.  
He is planning a team-building event for a group of people.  
Ben has this part of a map.

The context

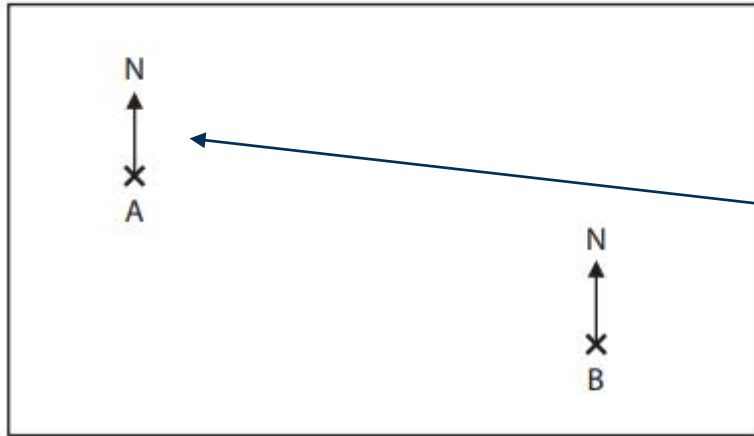


Diagram drawn accurately

The north line; you would measure from this line

**Key: 1 cm on the map is 1000 m on the ground**

The group will start at point A and walk directly to point B.

The scale; important for the second part of the question

Ben needs to write instructions to give to the group.  
The instructions need to include the

- bearing
- distance to be walked.

What you need to do

(a) Write the instructions for the group.  
Remember to give units with your answer.

(4)



**Answering the  
question**

Ben is an activity leader.  
He is planning a team-building event for a group of people.  
Ben has this part of a map.



**Key: 1 cm on the map is 1000 m on the ground**

The group will start at point A and walk directly to point B.

Ben needs to write instructions to give to the group.  
The instructions need to include the

- bearing
- distance to be walked.

- (a) Write the instructions for the group.  
Remember to give units with your answer.

**Diagram drawn  
accurately**

### Step 1

Use a protractor and measure the angle between A and B using the north line as a starting point.

### Step 2

Use a ruler and measure the distance between A and B (remember to use cm).

### Step 3

Use the scale in the key to convert the distance in centimetres to metres (remember to show your working out).

### Step 4

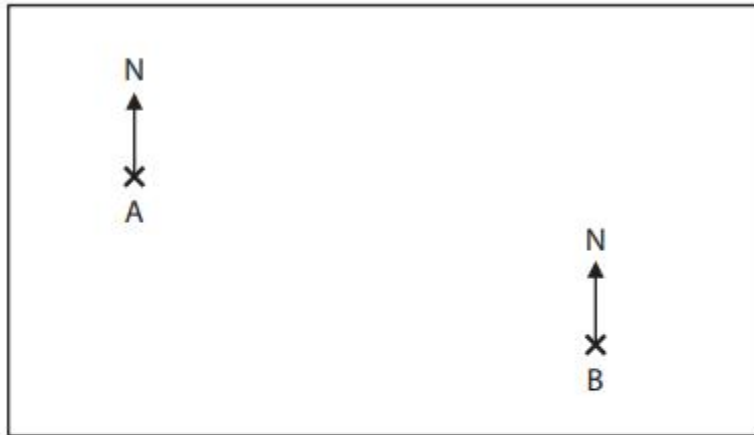
Write the instructions for the group.

(4)



**The answer**

Ben is an activity leader.  
He is planning a team-building event for a group of people.  
Ben has this part of a map.



**Key: 1 cm on the map is 1000 m on the ground**

The group will start at point A and walk directly to point B.

Ben needs to write instructions to give to the group.  
The instructions need to include the

- bearing
- distance to be walked.

(a) Write the instructions for the group.  
Remember to give units with your answer.

**Diagram drawn accurately**

**Step 1**

Use a protractor and measure the angle between A and B using the north line as a starting point. **112 degrees**

**Step 2**

Use a ruler and measure the distance between A and B (remember to use cm). **6.5cm**

**Step 3**

Use the scale in the key to convert the distance in centimetres to metres (remember to show your working out).  **$6.5 \times 1000 = 6500\text{m}$**

**Step 4**

Write the instructions for the group. **Walk for 6500m at a bearing of 112 degrees.**

(4)

**What did the Chair of  
Examiners say about  
this question?**

Pearson ran a trial of our sample assessment material where this question came from. This is the feedback from the Chair of Examiners:

- This question required learners to find the bearing from one point to another and interpretation of a simple plan drawn to scale.
- The majority of learners were able to engage correctly with the plan and given scale and appeared to have access to a ruler.
- It was pleasing to see correct units used when expressing the distance found from the plan.
- Very few attempts to find the bearing were seen.

In other words, most learners did not do the bearing part of the question, possibly because they did not know how to do it.

Hopefully this guide will help!

**There's so much  
more to learn**

ALWAYS LEARNING