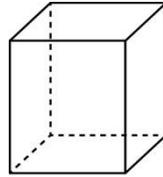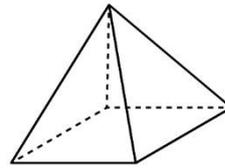NAME

Time:

Calculator Questions

1   Here are two solid shapes.

a   Write down the number of vertices of shape *A*.

(1 mark)

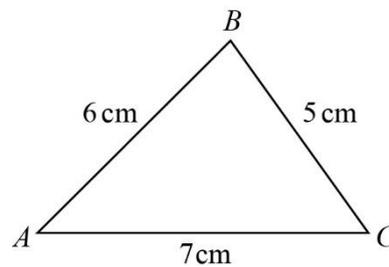b   Write down the number of faces of shape *B*.

(1 mark)

c   Write down the number of edges of shape *B*.

(1 mark)

3   The diagram shows a sketch of triangle *ABC*.

Use a ruler and compasses to draw an accurate diagram of triangle *ABC* in the space below.
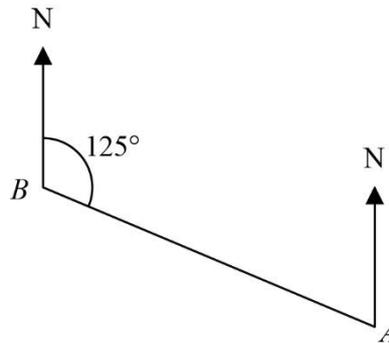
The 7 cm side has been drawn for you.

(3 marks)

5 Van *X* travels 324 km and uses 24 litres of petrol.

Van *Y* travels 290 km and uses 20 litres of petrol.

Which van uses petrol more economically?
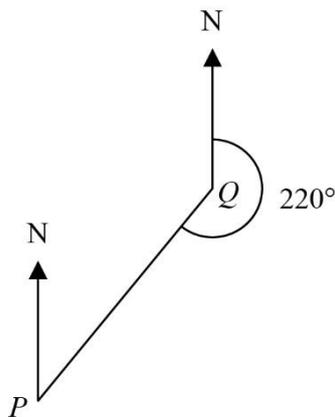
You must show your working.

(3 marks)

7

The bearing of *A* from *B* is 125°.

a Work out the bearing of *B* from *A*.
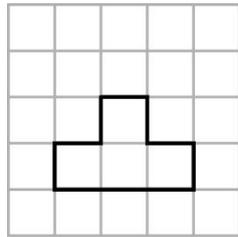
(2 marks)

The bearing of *P* from *Q* is 220°.

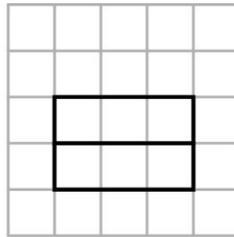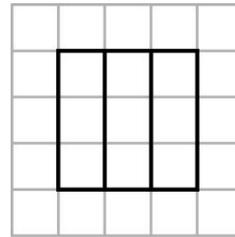**b** Work out the bearing of *Q* from *P*.

(2 marks)

9 Here are the front elevation, side elevation and plan of a 3D solid.

Front
elevation

Side
elevation

Plan

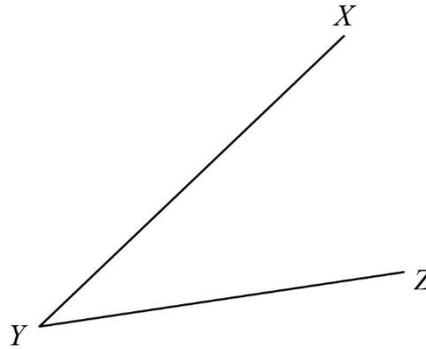In the space below, draw a sketch of the 3D solid.

(2 marks)

11 a Using a ruler and compass, bisect the line *AB*.

You must show all your construction lines.

B

A

(2 marks)

b Using ruler and compasses, bisect the angle *XYZ*.

You must show all your construction lines.

X

Z

Y

(2 marks)

13 The diagram represents a garden *ABCD*.

The scale of the diagram is 1 cm represents 1 m.

A

B

D

C

A tree is to be planted in the garden so that it is

- nearer to *BC* than *BA*
- more than 1 m from side *DC*
- more than 3 m from corner *C*.

Show, by shading on the diagram, the region where the tree may be planted.

(4 marks)

Overall mark	/23