**A picture containing drawing

Description automatically generated3D SOH CAH TOA GREEN**

1. The diagram represents a prism.

is a rectangle. is a square.

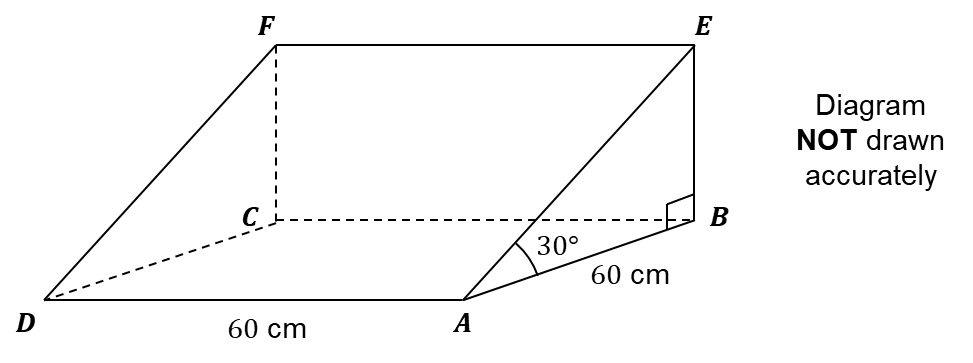
and are perpendicular to plane .

cm. cm. Angle . Angle .

Calculate the size of the angle that the line makes with the plane

.

Give your answer correct to 1 decimal place.

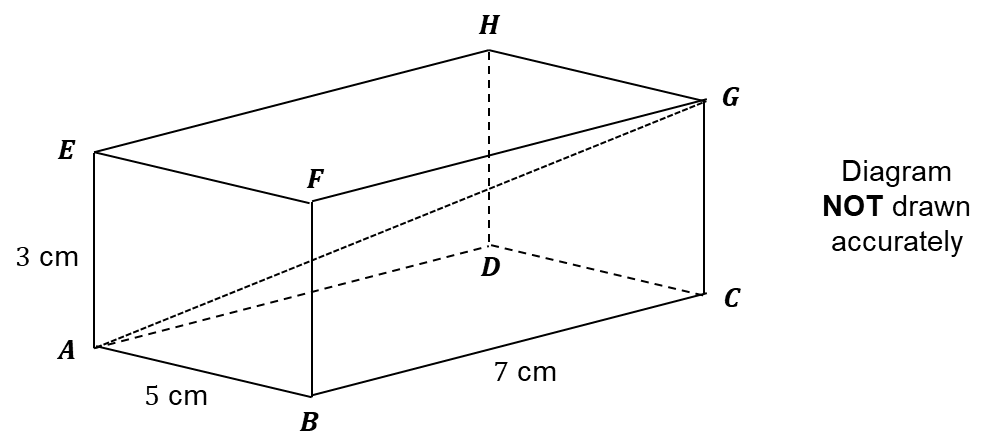


\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_°

(Total 4 marks)

2. The diagram represents a cuboid .

cm. cm. cm.



(a) Calculate the length of .

Give your answer correct to 3 significant figures.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ cm

(2)

(b) Calculate the size of the angle between and the face .

Give your answer correct to 1 decimal place.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_°

(2)

(Total 4 marks)

**A picture containing drawing

Description automatically generated3D SOH CAH TOA AMBER**

1. The diagram represents a prism.

is a rectangle. is a square.

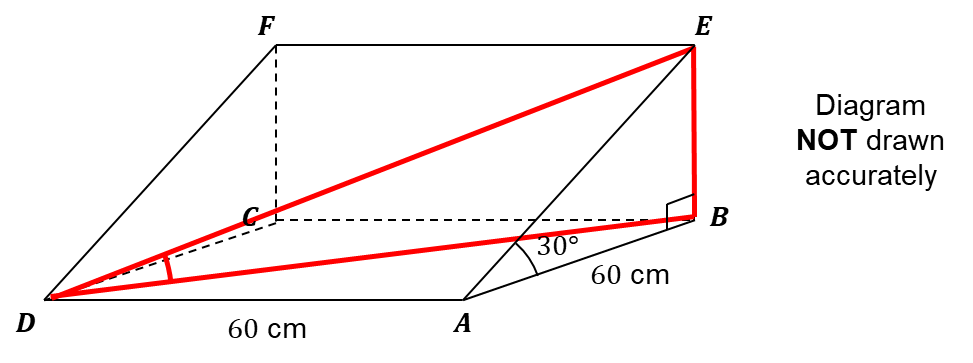
and are perpendicular to plane .

cm. cm. Angle . Angle .

Calculate the size of the angle that the line makes with the plane

.

Give your answer correct to 1 decimal place.

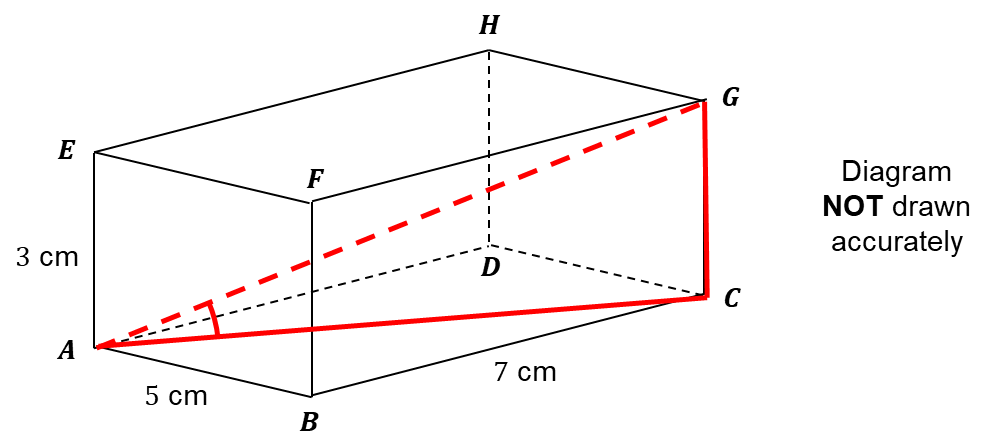


\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_°

(Total 4 marks)

2. The diagram represents a cuboid .

cm. cm. cm.



(a) Calculate the length of .

Give your answer correct to 3 significant figures.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ cm

(2)

(b) Calculate the size of the angle between and the face .

Give your answer correct to 1 decimal place.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_°

(2)

(Total 4 marks)

**A picture containing drawing

Description automatically generated3D SOH CAH TOA RED**

1. The diagram represents a prism.

is a rectangle. is a square.

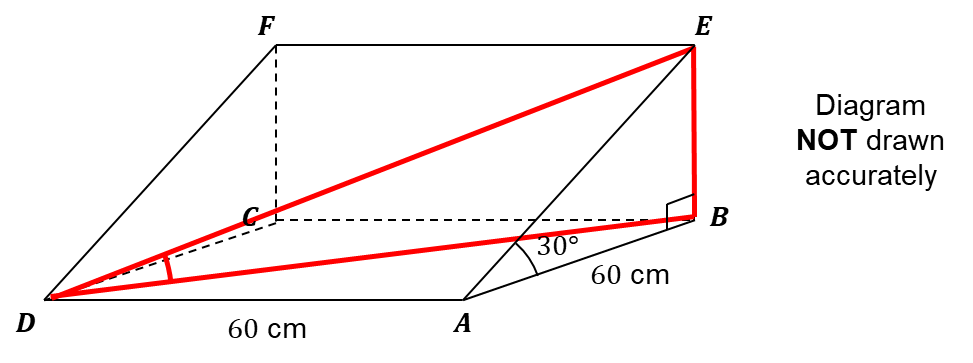
and are perpendicular to plane .

cm. cm. Angle . Angle .

Calculate the size of the angle that the line makes with the plane

.

Give your answer correct to 1 decimal place.



Start by using Pythagoras’ Theorem with triangle to calculate length .

Then use SOH CAH TOA with triangle to calculate the height of the prism.

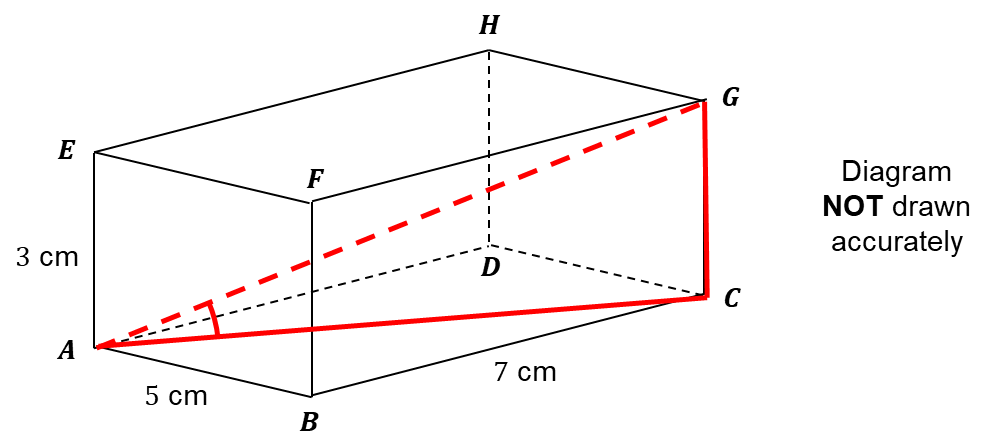
THEN use SOH CAH TOA with triangle to calculate the angle shown on the diagram.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_°

(Total 4 marks)

2. The diagram represents a cuboid .

cm. cm. cm.



Start by using Pythagoras’ Theorem with triangle to calculate length .

Then use Pythagoras’ Theorem with triangle to calculate length .

(a) Calculate the length of .

Give your answer correct to 3 significant figures.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ cm

(2)

(b) Calculate the size of the angle between and the face .

Give your answer correct to 1 decimal place.

Use SOH CAH TOA with triangle to calculate the angle shown on the diagram (you know lengths and already).

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_°

(2)

(Total 4 marks)