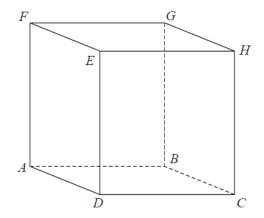
1 ABCDEFGH is a cuboid.



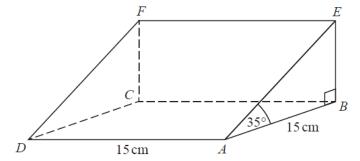
$$AB = 7.3 \text{ cm}$$

 $CH = 8.1 \text{ cm}$
Angle $BCA = 48^{\circ}$

Find the size of the angle between AH and the plane ABCD. Give your answer correct to 1 decimal place.

| (Total for Question | is 4 marks) | |
|---------------------|-------------|---|
| | | |
| | | 0 |

2 The diagram shows a triangular prism.



The base, ABCD, of the prism is a square of side length 15 cm. Angle ABE and angle CBE are right angles. Angle $EAB = 35^{\circ}$

M is the point on DA such that

$$DM: MA = 2:3$$

Calculate the size of the angle between EM and the base of the prism. Give your answer correct to 1 decimal place.

(Total for Question is 4 marks)