

11

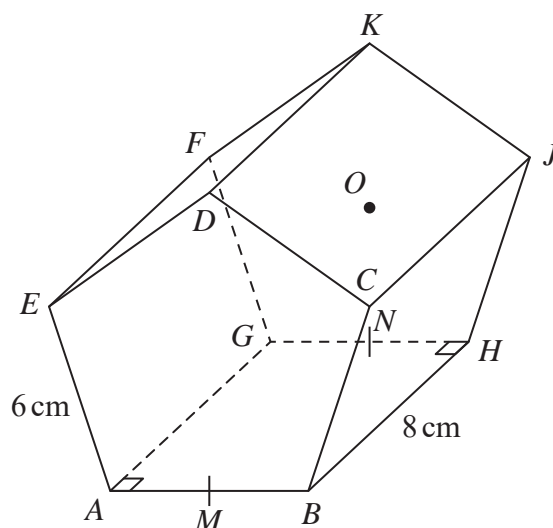
Diagram **NOT**
accurately drawn

Figure 5

Figure 5 shows a right prism $ABCDEFGHJK$.

A cross section of the prism is a regular pentagon with sides of length 6 cm.

$BH = 8$ cm.

M is the midpoint of AB .

N is the midpoint of GH .

O is the centre of pentagon $FGHIJ$.

(a) Find, in cm to 3 significant figures, the length of AO .

(5)

(b) Calculate the size, in degrees to 1 decimal place, of the angle between MK and MN .

(5)

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Question 11 continued

Handwriting practice area with horizontal dotted lines.



Question 11 continued

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Question 11 continued

Handwriting practice area with horizontal dotted lines.

(Total for Question 11 is 10 marks)

