

5

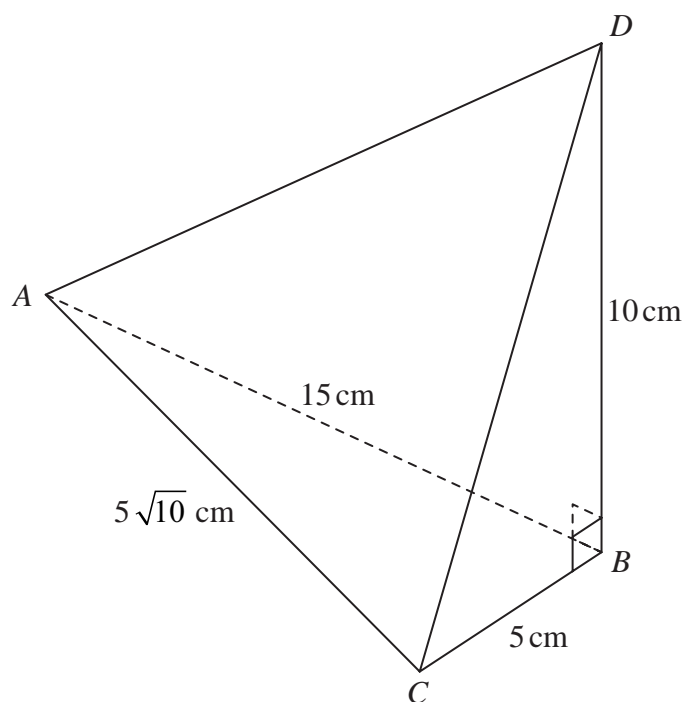
Diagram **NOT**
accurately drawn**Figure 1**

Figure 1 shows a triangular pyramid $ABCD$ where triangle ABC is the base and BD is perpendicular to the base.

$$AB = 15 \text{ cm} \quad AC = 5\sqrt{10} \text{ cm} \quad BC = 5 \text{ cm} \quad BD = 10 \text{ cm}$$

- (a) Show that $\angle ABC = 90^\circ$ (2)
- (b) Find, in degrees to 1 decimal place, the size of $\angle DAC$. (4)
- The point X on AC is such that BX is perpendicular to AC .
- (c) Find, in degrees to 1 decimal place, the size of $\angle DXB$. (4)



Question 5 continued

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



P 5 5 8 8 5 A 0 1 1 3 6

Question 5 continued

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



Question 5 continued

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

(Total for Question 5 is 10 marks)

P 5 5 8 8 5 A 0 1 3 3 6