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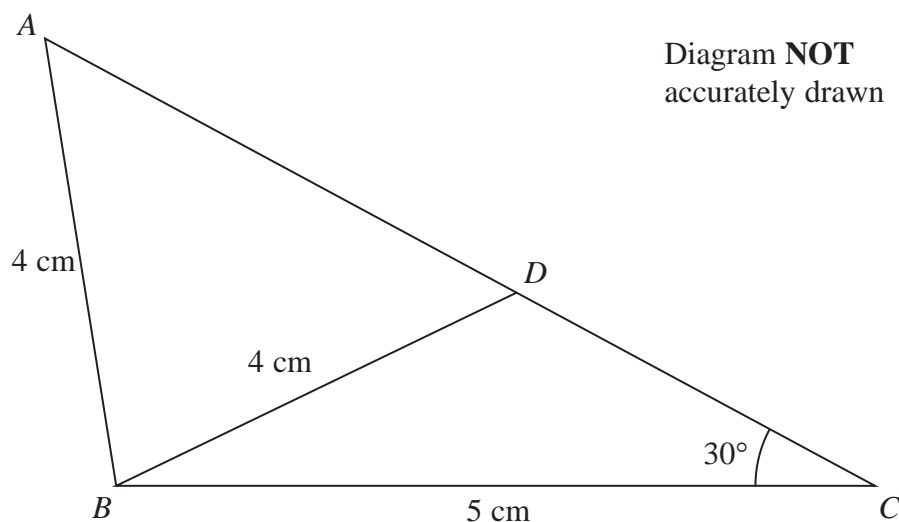


Figure 1

Figure 1 shows the triangle ABC with $AB = 4$ cm, $BC = 5$ cm and angle $BCA = 30^\circ$

The point D lies on AC such that $BD = 4$ cm and angle BDC is obtuse.

Find

- (a) the size of angle BDC , giving your answer in degrees correct to 1 decimal place, (3)
- (b) the length, in cm, of AD , giving your answer correct to 3 significant figures, (3)
- (c) the area, in cm^2 , of triangle ABD , giving your answer correct to 3 significant figures. (2)

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Question 7 continued

Area for writing answers to Question 7 continued.



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Question 7 continued**(Total for Question 7 is 8 marks)**

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