

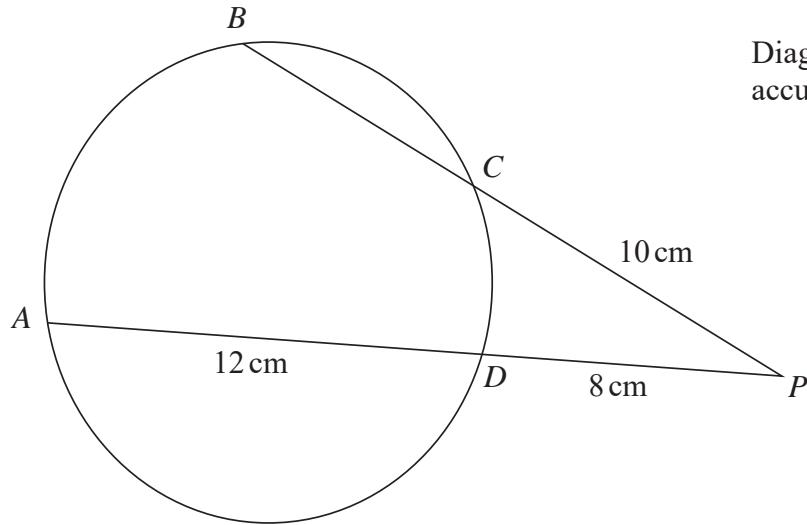
DO NOT WRITE IN THIS AREA

- 8 The  $n$ th term of a sequence is given by  $100 - \frac{1}{2}n^2$

Calculate the difference between the 8th term and the 12th term of the sequence.

(Total for Question 8 is 2 marks)

9



In the diagram,  $A, B, C$  and  $D$  are four points on the circle  $ABCD$ .

The point  $P$  lies outside the circle  $ABCD$  so that  $BCP$  and  $ADP$  are straight lines.

$CP = 10\text{ cm}$ ,  $AD = 12\text{ cm}$  and  $DP = 8\text{ cm}$ .

Calculate the length, in cm, of  $BC$ .

cm

(Total for Question 9 is 2 marks)



P 5 3 3 0 5 A 0 5 2 0