2

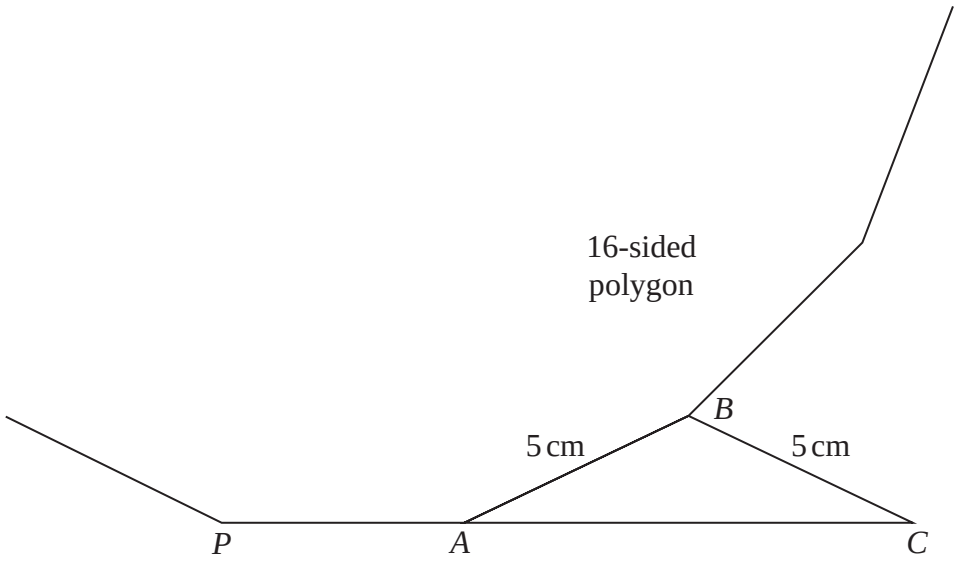

Diagram **NOT** accurately drawn

Figure 1

Figure 1 shows part of a regular 16-sided polygon in which PA and AB are two sides.
Figure 1 also shows the isosceles triangle ABC in which $AB = CB = 5\,\text{cm}$.

PAC is a straight line.

Calculate the length, in cm to 3 significant figures, of AC.

(4)

Sum of interior angles of polygon
$(2n - 4)$ right angles

(Total for Question 2 is 4 marks)