3

Diagram **NOT** accurately drawn

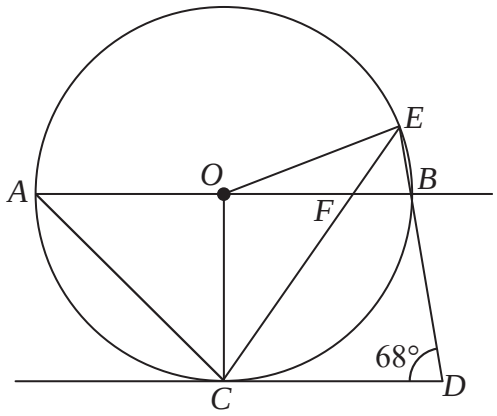

Figure 1

Figure 1 shows a circle with centre O. The points A, C, B and E lie on the circle.
AOB is a diameter of the circle and DC is the tangent to the circle at C.
CFE and DBE are straight lines.
AB is parallel to CD and $\angle CDE = 68^\circ$

(a) Write down the size of $\angle OCD$

(1)

(b) Find the size of $\angle OAC$

(1)

(c) Giving reasons, find the size in degrees of

(i) $\angle FBE$

(2)

(ii) $\angle CEB$

(2)

(iii) $\angle EFB$

(2)

(d) Find the size, in degrees, of the obtuse angle AOE.

(1)

Question 3 continued

(Total for Question 3 is 9 marks)