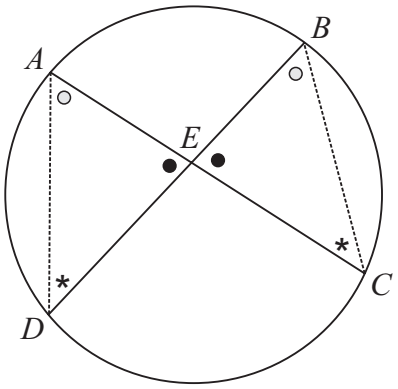
Sample Paper 7: Paper 2

Question 6 (25 marks)



Question 6 (a) (i)

$|\angle DEA| = |\angle BEC|$ (Vertically opposite)

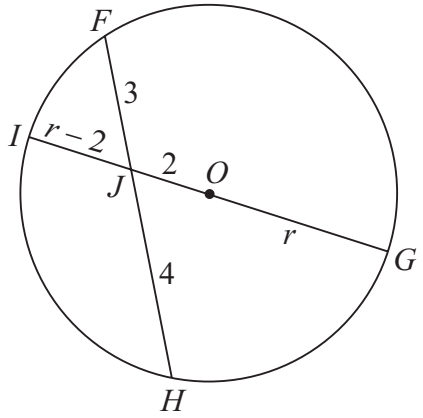
$|\angle EAD| = |\angle CBE|$ (Standing on same arc)

$\therefore |\angle ADE| = |\angle BCE|$

Question 6 (a) (ii)

$$\frac{|AE|}{|DE|} = \frac{|BE|}{|EC|}$$

$\therefore |AE||EC| = |BE||DE|$



Question 6A (b)

$|FJ||JH| = |IJ||JG|$

$3 \times 4 = (r-2)(r+2)$

$12 = r^2 - 4$

$16 = r^2$

$\therefore r = 4$