

- 8** A curve has equation  $y = 3x - \frac{4}{x}$  and passes through the points  $A(1, -1)$  and  $B(4, 11)$ . At each of the points  $C$  and  $D$  on the curve, the tangent is parallel to  $AB$ . Find the equation of the perpendicular bisector of  $CD$ . [7]