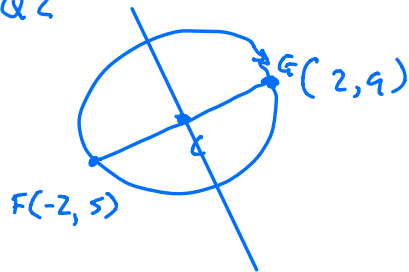


Exercise 6B

Q2



$$C = \left(\frac{-2+2}{2}, \frac{5+9}{2} \right) = (0, 7)$$

$$\text{grad FG} = \frac{9-5}{2-(-2)} = \frac{4}{4} = 1$$

$$\text{grad L} = -1$$

$$y - y_1 = m(x - x_1)$$

$$y - 7 = 1(x - 0)$$

$$\underline{y = x + 7}$$

Q4 A(-4, -9)

B(6, -3)

C(11, 5)

D(-1, 9)

a) $\text{grad AB} = \frac{-9-(-3)}{-4-6} = \frac{-6}{-10} = \frac{3}{5}$

\perp bisector gradient = $-\frac{5}{3}$

Midpoint AB = $\left(\frac{-4+6}{2}, \frac{-9+(-3)}{2} \right)$

= (1, -6)

$$y - y_1 = m(x - x_1)$$

$$y - -6 = -\frac{5}{3}(x - 1)$$

$$y + 6 = -\frac{5}{3}x + \frac{5}{3}$$

$$\underline{y = -\frac{5}{3}x - \frac{13}{3}}$$

Do Q5