

(3)

Q4.

$$\begin{array}{l} \text{Ticket price A} \\ P_A = \frac{1350 + 24x}{x - 9} \end{array}$$

$$\begin{array}{l} \text{Ticket Price B} \\ P_B = \frac{1800 + 20x}{x - 12} \end{array}$$

Solve $P_A = P_B$ to find the minimum number of tickets which need to be sold so that the price of Option B would be less than the price of Option A tickets.

Q5

The quadratic equation $x^2 - (k+1)x + 4k = 0$ has 2 roots. If the difference between the roots is 1, find the value of k .