

Q No.1:

Find the x and y intercepts for the equation $y = x^2 + 6x + 8$.

Answers: x -intercepts : $(-2, 0)$ and $(-4, 0)$, y -intercept: $(0, 8)$.

Q No. 2:

Find the x and y intercepts for the equation $16x^2 + 49y^2 = 36$

Answers: x -intercept: $\left(\frac{3}{2}, 0\right)$ and $\left(-\frac{3}{2}, 0\right)$, y -intercept: $\left(0, \frac{6}{7}\right)$ and $\left(0, -\frac{6}{7}\right)$

Q No. 3

Check whether the graph of the function $y = x^4 - 2x^2 - 8$ is symmetric about x -axis and y -axis or not. (Do all necessary steps).

Answers: symmetric about y -axis but not symmetric about x -axis.

Q No. 4

Check whether the graph of the function $9x^2 + 4xy = 6$ is symmetric about x -axis, y -axis and origin or not. (Do all necessary steps).

Answers: Symmetric about origin and not symmetric about x and y -axis.

Q No. 5

Check whether the graph of function $y = \frac{x^2 - 4}{x^2 + 1}$ is symmetric about y -axis and origin or not. (Do all necessary steps).

Answers: symmetric about y -axis and not symmetric about origin.