



$\sqrt{5}$  and  $-\sqrt{5}$  are the zeros of the polynomial

$\therefore (x - \sqrt{5})(x + \sqrt{5}) = x^2 - 5$  will divide the given

Dividing  $x^4 + 4x^3 - 2x^2 - 20x - 15$  by  $x^2 - 5$ , we get

$$\begin{aligned}\text{Quotient} &= x^2 + 4x + 3 = x^2 + 3x + x + 3 \\ &= x(x+3) + (x+3) = (x+3)(x+1)\end{aligned}$$

$$\therefore q(x) = 0 \text{ or } (x+3)(x+1) = 0$$

Thus, the zeros of the given polynomial are

$\sqrt{5}, -\sqrt{5}, -3, -1$

\*\*\*\*\* END \*\*\*\*\*