3(iii) $p(x) = x^2 - 1$

$p(1) = 1^2 - 1$
$= 1 - 1$
$= 0$

$p(-1) = (-1)^2 - 1$
$= 1 - 1$
$= 0$

$\therefore \pm 1$ are zeros of $p(x)$

3(iv) $p(x) = (x+1)(x-2)$

$p(-1) = (-1+1)(-1-2)$
$= 0 \times (-3)$
$= 0$

$p(2) = (2+1)(2-2)$
$= 3 \times 0$
$= 0$

$\therefore -1, 2$ are zeros of $p(x)$

3(v) $p(x) = x^2$

$p(0) = 0^2$
$= 0$

$\therefore 0$ is a zero of $p(x)$

3(vi) $p(x) = lx + m$

$p\left(-\frac{m}{l}\right) = l\left(-\frac{m}{l}\right) + m$
$= -m + m$
$= 0$

$\therefore 0$ is a zero of $p(x)$

3(vii) $p(x) = 3x^2 - 1$

$p\left(-\frac{1}{\sqrt{3}}\right) = 3 \times \left(-\frac{1}{\sqrt{3}}\right)^2 - 1$
$= 3 \times \frac{1}{3} - 1$
$= 1 - 1$
$= 0$

$p\left(\frac{2}{\sqrt{3}}\right) = 3 \times \left(\frac{2}{\sqrt{3}}\right)^2 - 1$
$= 3 \times \frac{4}{3} - 1$
$= 4 - 1$
$= 3 \neq 0$

$\therefore -\frac{1}{\sqrt{3}}$ is a zero of $p(x)$
$\frac{2}{\sqrt{3}}$ is not a zero of $p(x)$

3(viii) $p(x) = 2x + 1$

$p\left(\frac{1}{2}\right) = 2 \times \frac{1}{2} + 1$
$= 1 + 1$
$= 2$
$\neq 0$

$\frac{1}{2}$ is not a zero of $p(x)$

4(i) $p(x) = x + 5$

For finding zero
$x + 5 = 0$
$\Rightarrow x = -5$
$\therefore -5$ is a zero of $p(x)$