3.

Solution

To find the p-intercept, we set v equal to 0, so :

$v(p) = p^2 - 5p + 4 = (-4 + p)(-1 + p) = 0$

$-4 + p = 0$ or $-1 + p = 0$

$p = 4$ or $p = 1$

So, the p-intercepts are at the points $(4,0)$ and $(1,0)$