

1.

Solution

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

$$v(d) = d^2 - 8d + 15 = (-5 + d)(-3 + d) = 0$$

$$-3 + d = 0 \text{ or } -5 + d = 0$$

$$d = 3 \text{ or } d = 5$$

So, the d-intercepts are at the points $(3, 0)$ and $(5, 0)$