5.

Solution

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

$d(r) = r^2 - 3r + 2 = (-2 + r)(-1 + r) = 0$

$-1 + r = 0$ or $-2 + r = 0$

$r = 1$ or $r = 2$

So, the r-intercepts are at the points $(1,0)$ and $(2,0)$