

1.

Solution

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

$$d(z) = z^2 + z - 6 = (-2 + z)(3 + z) = 0$$

$$-2 + z = 0 \text{ or } 3 + z = 0$$

$$z = 2 \text{ or } z = -3$$

So, the z -intercepts are at the points $(2, 0)$ and $(-3, 0)$