

3.

Solution

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

$$y(z) = z^2 - 8z + 12 = (-6 + z)(-2 + z) = 0$$

$$-2 + z = 0 \text{ or } -6 + z = 0$$

$$z = 2 \text{ or } z = 6$$

So, the z -intercepts are at the points $(2, 0)$ and $(6, 0)$