

3.

## Solution

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

$$b(r) = r^2 - 3r - 18 = (-6 + r)(3 + r) = 0$$

$$-6 + r = 0 \text{ or } 3 + r = 0$$

$$r = 6 \text{ or } r = -3$$

So, the  $r$ -intercepts are at the points  $(6, 0)$  and  $(-3, 0)$