Solution

To find the x-intercept, we set $\sf r$ equal to 0, so :

 $r(x) = x^2 - 4 = (-2 + x) (2 + x) = 0$

2 + x = 0 or -2 + x = 0x = -2 or x = 2

So, the x-intercepts are at the points (-2,0) and (2,0)