Solution

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

3 + u = 0 or -3 + u = 0

u = -3 or u = 3

So, the u-intercepts are at the points (-3,0) and (3,0)

 $z(u) = u^2 - 9 = (-3 + u) (3 + u) = 0$