Solution

To find the m-intercept, we set ${\sf v}$ equal to 0, so :

 $v(m) = m^2 - 3m - 10 = (-5 + m)(2 + m) = 0$

2 + m = 0 or -5 + m = 0

So, the m-intercepts are at the points (-2,0) and (5,0)

m = -2 or m = 5