Solution

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

 $m(b) = b^2 - 2b - 8 = (-4 + b)(2 + b) = 0$

2 + b = 0 or -4 + b = 0

So, the b-intercepts are at the points (-2,0) and (4,0)

b = -2 or b = 4