2. $w^3 + 2w^2 - 9w - 18$ has a factor $(w-(-3))$ compute all other factors:

$(w-3)(w+1)(w+3)$

$(w-3)w(w+2)$

$(w-3)(w+2)(w+3)$

$(w-4)(w-3)^2$

Solution

Apply Long Division.

$(w-3)(w+2)(w+3)$