3. $d^3 + 2d^2 - 7d + 4$ has a factor $(d-(-4))$ compute all other factors:

$(d - 3)(d - 1)^2$

$(d - 3)(d - 1)(d + 2)$

$(d - 1)^2(d + 4)$

$(d - 1)d(d + 2)$

Solution

Apply Long Division.

$(d - 1)^2(d + 4)$