3. $k^3 - 2k^2 - k + 2$ has a factor $(k - (-1))$ compute all other factors:

$(k - 4)^2 (k - 2)$

$(k - 3)^2 (k - 2)$

$(k - 2) (k - 1) (k + 1)$

$(k - 2)^2 (k + 1)$

Solution

Apply Long Division.

$(k - 2) (k - 1) (k + 1)$