2. $k^3 + 5k^2 + 4k$ has a factor $(k-(-4))$ compute all other factors:

$(k-4)(k-1)(k+1)$

$(k-2)(k+1)(k+4)$

$k(k+1)(k+4)$

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

Solution

Apply Long Division.

$k(k+1)(k+4)$