

1. $k^3 - 3k^2 - 4k$ has a factor $(k - (-1))$ compute all other factors:

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

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

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

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

Solution

Apply Long Division.

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