

2. $n^3 + 2n^2 - 11n - 12$ has a factor $(n - (-4))$ compute all other factors:

$$(n + 1) (n + 3) (n + 4)$$

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

$$(n - 3) (n + 1) (n + 4)$$

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

Solution

Apply Long Division.

$$(n - 3) (n + 1) (n + 4)$$