

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

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

$$(n - 1)^2 (n + 3)$$

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

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

**Solution**

Apply Long Division.

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