

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

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

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

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

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

**Solution**

Apply Long Division.

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