

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

$$(x + 1)(x + 4)^2$$

$$(x + 1)(x + 2)(x + 4)$$

$$(x - 1)(x + 1)(x + 2)$$

$$(x + 1)(x + 2)^2$$

**Solution**

Apply Long Division.

$$(x - 1)(x + 1)(x + 2)$$