

2.  $a^3 - a^2 - 6a$  has a factor  $(a - (-2))$  compute all other factors:

$$(a - 4) (a - 2)^2$$

$$(a - 2) (a - 1) (a + 2)$$

$$(a - 3) a (a + 2)$$

$$(a - 2)^2 (a - 1)$$

**Solution**

Apply Long Division.

$$(a - 3) a (a + 2)$$