

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

$$(z - 4)(z - 2)(z + 4)$$

$$(z - 4)(z - 2)(z + 2)$$

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

$$(z - 2)^2(z + 2)$$

**Solution**

Apply Long Division.

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