

1.  $c^3 + 8c^2 + 19c + 12$  has a factor  $(c - (-4))$  compute all other factors:

$$(c - 3) (c + 1) (c + 4)$$

$$(c - 4) (c - 3) (c + 4)$$

$$(c + 1) (c + 3) (c + 4)$$

$$(c - 2) c (c + 4)$$

**Solution**

Apply Long Division.

$$(c + 1) (c + 3) (c + 4)$$