

1.  $f^3 + 4f^2 - 9f - 36$  has a factor  $(f - (-4))$  compute all other factors:

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

$$(f - 3) (f - 2) (f + 4)$$

$$(f - 3) (f + 3) (f + 4)$$

$$(f + 2) (f + 4)^2$$

**Solution**

Apply Long Division.

$$(f - 3) (f + 3) (f + 4)$$