

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

$$(f - 2) (f + 1) (f + 3)$$

$$(f + 1) (f + 3)^2$$

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

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

Solution

Apply Long Division.

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