

5. $f^3 + 5f^2 + 8f + 4$ has a factor $(f - (-2))$ compute all other factors:

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

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

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

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

Solution

Apply Long Division.

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