

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

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

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

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

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

Solution

Apply Long Division.

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