

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

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

$$(u - 4) (u - 1) (u + 2)$$

$$u (u + 1) (u + 4)$$

$$(u - 4) (u - 1) u$$

Solution

Apply Long Division.

$$u (u + 1) (u + 4)$$