

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

$$(u - 1) (u + 1) (u + 3)$$

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

$$u^2 (u + 2)$$

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

Solution

Apply Long Division.

$$u^2 (u + 2)$$