

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

$$(n - 3) (n + 2) (n + 4)$$

$$(n - 3) (n + 2) (n + 3)$$

$$n (n + 2)^2$$

$$(n - 4)^2 (n + 2)$$

Solution

Apply Long Division.

$$n (n + 2)^2$$