

1. $k^3 + 6k^2 + 9k$ has a factor $(k - (-3))$ compute all other factors:

$$(k - 2) (k + 2)^2$$

$$(k - 2) k (k + 2)$$

$$k (k + 3)^2$$

$$k (k + 2) (k + 3)$$

Solution

Apply Long Division.

$$k (k + 3)^2$$