

1. $t^3 + 3t^2 - 9t - 27$ has a factor $(t - (-3))$ compute all other factors:

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

$$(t - 3) (t + 3) (t + 4)$$

$$(t - 3) (t + 3)^2$$

$$(t - 4) (t + 3)^2$$

Solution

Apply Long Division.

$$(t - 3) (t + 3)^2$$