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

$(p - 4)(p - 2)(p + 4)$

$(p - 2)(p + 2)^2$

$p(p + 3)^2$

$(p - 2)p(p + 1)$

Solution

Apply Long Division.

$p(p + 3)^2$