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

$g(g+3)(g+4)$

$(g-4)(g-1)(g+3)$

$g(g+3)^2$

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

Solution
Apply Long Division.

$g(g+3)^2$