5. $a^3 - 7a^2 + 12a$ has a factor $(a-0)$ compute all other factors:

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

$(a - 1)$ a $(a + 1)$

$(a - 4)$ $(a - 3)$ a

$(a + 1)$ $(a + 2)^2$

Solution
Apply Long Division.
$(a - 4)$ $(a - 3)$ a