$$(j-1) (j+1)^{2}$$
 $(j-1) (j+1) (j+2)$
 $(j-2) (j+1)^{2}$

1. $j^3 - 3j - 2$ has a factor (j - (-1)) compute all other factors:

Solution

Apply Long Division.

(j-3)(j-1)(j+1)

 $(j-2)(j+1)^2$