$$(r-4) (r-2) (r-1)$$
 $(r-4) (r-2) (r+1)$
 $(r-4) (r-1) r$
 $(r-4) (r-3) (r+3)$
Solution

1. $r^3 - 5 r^2 + 4 r$ has a factor (r-0) compute all other factors:

Apply Long Division. (r-4) (r-1) r