

1. $d^3 + 2d^2 - 5d - 6$ has a factor $(d - (-3))$ compute all other factors:

$$(d - 2)^2 d$$

$$(d - 2) (d + 3)^2$$

$$(d - 2) (d + 1) (d + 3)$$

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

Solution

Apply Long Division.

$$(d - 2) (d + 1) (d + 3)$$