

5. $d^3 - d^2 - 9d + 9$ has a factor $(d - (-3))$ compute all other factors:

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

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

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

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

Solution

Apply Long Division.

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