

2. $d^3 + 10d^2 + 33d + 36$ has a factor $(d - (-4))$ compute all other factors:

$$d (d + 4)^2$$

$$(d - 4) (d + 1) (d + 4)$$

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

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

Solution

Apply Long Division.

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