

5. $y^3 + 7y^2 + 14y + 8$ has a factor $(y - (-4))$ compute all other factors:

$$(y - 1) (y + 1) (y + 2)$$

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

$$(y + 1) (y + 2) (y + 4)$$

$$y (y + 1)^2$$

Solution

Apply Long Division.

$$(y + 1) (y + 2) (y + 4)$$