

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

$$(y - 4) (y - 2) (y + 2)$$

$$(y - 4) (y - 3) (y - 2)$$

$$(y - 2) y (y + 4)$$

$$(y - 2) (y + 2)^2$$

**Solution**

Apply Long Division.

$$(y - 2) y (y + 4)$$