

2. $x^3 + 3x^2 - 6x - 8$ has a factor $(x - (-4))$ compute all other factors:

$$x(x + 2)(x + 4)$$

$$x(x + 1)(x + 4)$$

$$(x - 2)(x + 1)(x + 4)$$

$$(x - 2)(x + 2)(x + 4)$$

Solution

Apply Long Division.

$$(x - 2)(x + 1)(x + 4)$$