

2. $a^3 + 4a^2 - 4a - 16$ has a factor $(a - (-4))$ compute all other factors:

$$(a - 1) (a + 1) (a + 2)$$

$$(a - 2) (a + 2)^2$$

$$(a - 2) (a + 2) (a + 4)$$

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

Solution

Apply Long Division.

$$(a - 2) (a + 2) (a + 4)$$