

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

$$(n - 4) (n + 2) (n + 4)$$

$$(n - 4) (n + 2)^2$$

$$(n - 4) n (n + 4)$$

$$(n - 4) (n + 1) (n + 3)$$

Solution

Apply Long Division.

$$(n - 4) n (n + 4)$$