

1. $e^3 + 8e^2 + 20e + 16$ has a factor $(e - (-4))$ compute all other factors:

$$e(e + 1)(e + 2)$$

$$(e - 2)^2(e + 2)$$

$$(e + 2)^2(e + 4)$$

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

Solution

Apply Long Division.

$$(e + 2)^2(e + 4)$$