

2. $g^3 - g$ has a factor $(g - (-1))$ compute all other factors:

$$(g - 4) (g - 1) (g + 1)$$

$$(g - 1)^2 (g + 4)$$

$$(g - 1) g (g + 1)$$

$$(g - 2) (g - 1) (g + 3)$$

Solution

Apply Long Division.

$$(g - 1) g (g + 1)$$