

1.  $g^3 - 3g^2 - 9g + 27$  has a factor  $(g - (-3))$  compute all other factors:

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

$$(g - 4) (g - 2) (g + 3)$$

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

$$g^2 (g + 3)$$

**Solution**

Apply Long Division.

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