

แบบฝึกหัดเรื่อง สมการพหุนามดีกรีสูง

จงเขียนเซตคำตอบของสมการในแต่ละข้อต่อไปนี้

1.  $6x^2 + 2x = 0$

Sol.  $2x( \quad ) = 0$

Therefore  $2x = 0$  or  $\quad = 0$

Ans.  $x = \quad ,$

2.  $x^2 - 4 = 0$

Sol.  $( \quad )( \quad ) = 0$

Therefore  $\quad = 0$  or  $\quad = 0$

Ans.  $x = \quad ,$

3.  $x^2 - 2x - 3 = 0$

Sol.  $( \quad )( \quad ) = 0$

Therefore  $\quad = 0$  or  $\quad = 0$

Ans.  $x = \quad ,$

4.  $2x^3 - 7x^2 + 6x = 0$

Sol.  $x( x^2 - \quad x + \quad ) = 0$

$x( \quad )( \quad ) = 0$

Therefore  $x = 0$  or  $\quad = 0$

or  $\quad = 0$

Ans.  $x = \quad , \quad ,$

5.  $x^3 + x^2 - 9x - 9 = 0$

Sol.  $(x^3 + x^2) - ( \quad x + \quad ) = 0$

$x^2(x + \quad) - ( \quad x + \quad ) = 0$

$(x + \quad)(x^2 - \quad) = 0$

$(x + \quad)(x + \quad)(x - \quad) = 0$

Therefore  $\quad = 0$  or  $\quad = 0$

or  $\quad = 0$

Ans.  $x = \quad , \quad ,$

6.  $3x^3 - 2x^2 - 12x + 8 = 0$

Sol.  $( \quad - \quad ) - ( \quad - \quad ) = 0$

$( \quad ) - ( \quad ) = 0$

$( \quad )( \quad ) = 0$

$( \quad )( \quad )( \quad ) = 0$

Therefore  $\quad = 0$  or  $\quad = 0$

or  $\quad = 0$

Ans.  $x = \quad , \quad ,$