

# Personal Skills 1

**Solve polynomial equations with degree n in the form  $ax^2+bx+c=0$**

Learning outcomes Find the n root of a complex number when  $n \in \mathbb{I}^+$ , and Solve polynomial equations of one variable with integer coefficients of degree less than or equal to three.

Intended destination Solve polynomial equations of one variable of the form  $ax^2+bx+c=0$  the coefficients are integers.

Name ..... Class. ....No.....

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Find answers to the following equation.

Example

1.  $x^2+3x-4=0$   
 $(x+4)(x-1)=0$   
 $x=1, -4$   
answer {1, -4}

2.  $x^2+x+1=0$  ใช้สูตร  
 $a = 1$  (coefficients of  $x^2$ )     $b = 1$  (coefficients of  $x$ )  
 $c = 1$  (Constant)  

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$= \frac{-1 \pm \sqrt{1^2 - 4(1)(1)}}{2(1)}$$

$$= \frac{-1 \pm \sqrt{-3}}{2}$$

$$= \frac{-1 \pm \sqrt{3}i}{2}$$



<p>1)      <math>3x^2-2x+1=0</math>  <u>Solution</u></p>	<p>3)      <math>x^2-2x-1=0</math>  <u>Solution</u></p>
<p>2)      <math>2x^2+2x+5=0</math>  <u>Solution</u></p>	<p>4)      <math>x^2-4x+5=0</math>  <u>Solution</u></p>

Summary score

Score 8 points made ..... points

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