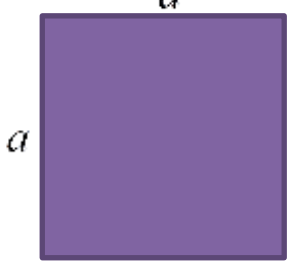
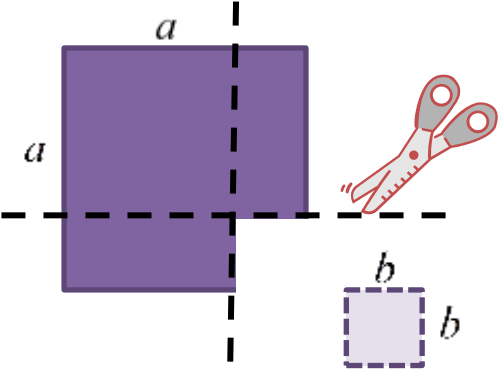
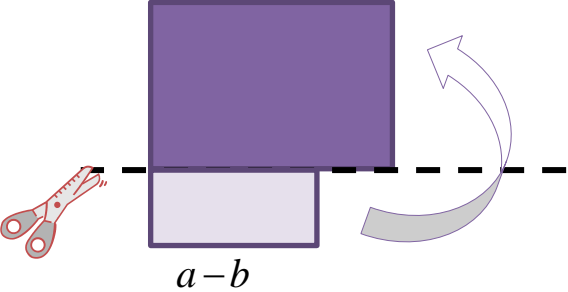
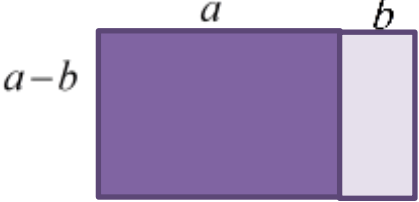
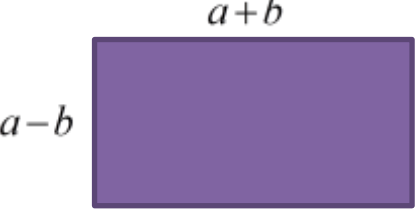


主題三 利用乘法公式 $a^2 - b^2 = (a+b)(a-b)$ 作因式分解

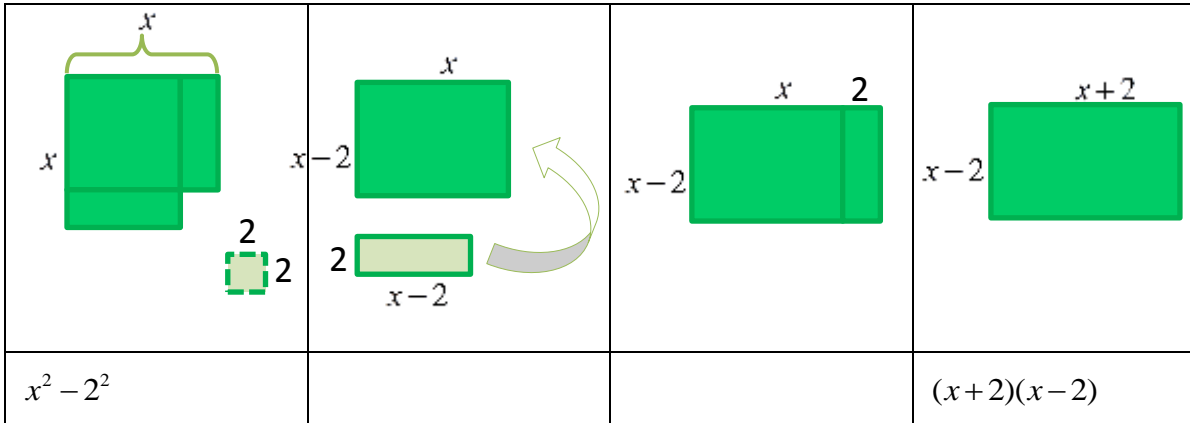
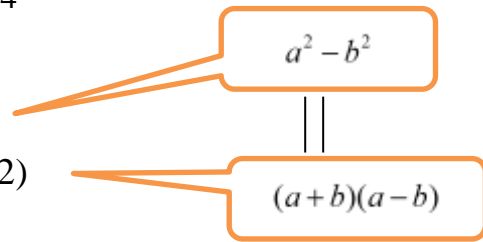
	a^2
	$a^2 - b^2$
	
	$a^2 - b^2$ $= (a+b)(a-b)$

【Part One】

1. 例：

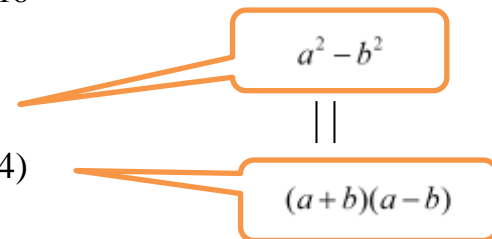
(1) 因式分解 $x^2 - 4$

$$\begin{aligned} \text{解： } x^2 - 4 \\ &= x^2 - 2^2 \\ &= (x + 2)(x - 2) \end{aligned}$$



(2) 因式分解 $x^2 - 16$

$$\begin{aligned} \text{解： } x^2 - 16 \\ &= x^2 - 4^2 \\ &= (x + 4)(x - 4) \end{aligned}$$



2. 練習題：

因式分解下列各式子

(1) $x^2 - 25 =$

(2) $x^2 - 9 =$

【Part Two】

1. 例：

(1) 因式分解 $9x^2 - 4$

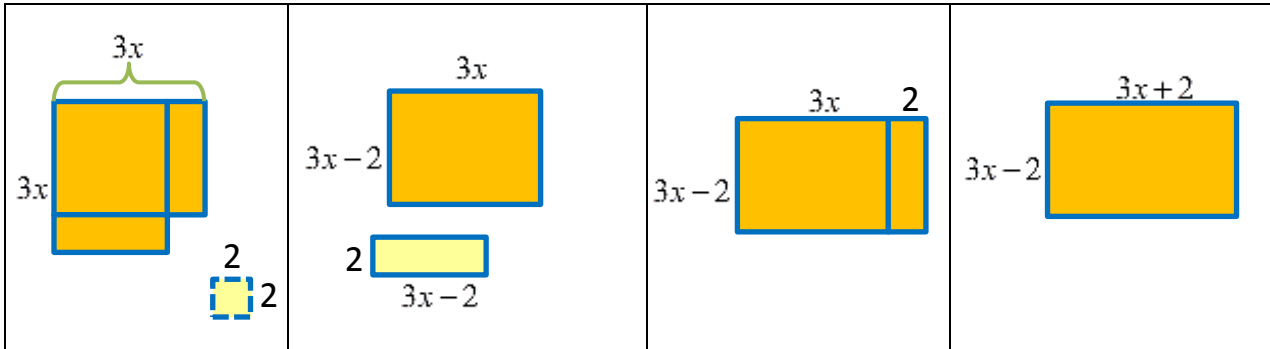
解： $9x^2 - 4$

$= (3x)^2 - 2^2$

$= (3x + 2)(3x - 2)$

$a^2 - b^2$

$(a+b)(a-b)$

(2) 因式分解 $16x^2 - 1$

解： $16x^2 - 1$

$= (4x)^2 - 1^2$

$= (4x + 1)(4x - 1)$

2. 練習題

(1) $4x^2 - 25 =$

(2) $100x^2 - 1 =$