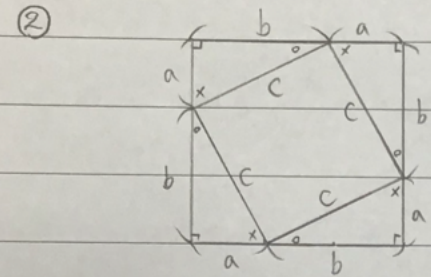
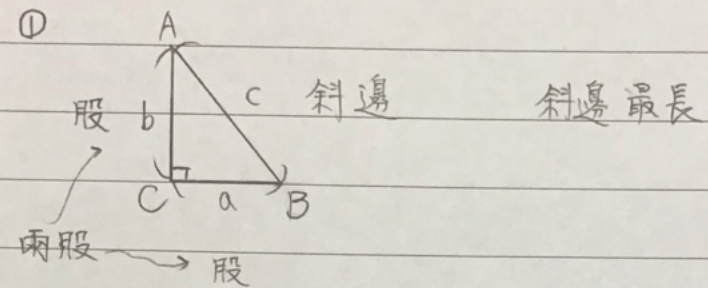


### 畢氏定理

#### (1) 直角△的邊長關係

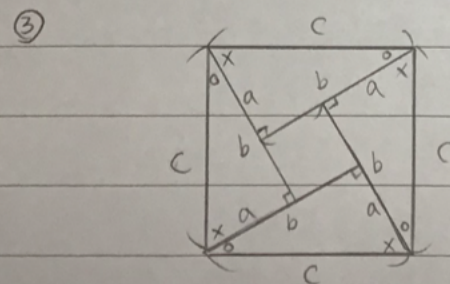


大正方形 = 小正方形 + 4個直角△

$$(a+b)^2 = c^2 + 4 \cdot a \cdot b \cdot \frac{1}{2}$$

$$a^2 + 2ab + b^2 = c^2 + 2ab$$

$$a^2 + b^2 = c^2$$



大正方形 = 小正方形 + 4個直角△

$$c^2 = (b-a)^2 + 4 \cdot a \cdot b \cdot \frac{1}{2}$$

$$c^2 = b^2 - 2ab + a^2 + 2ab$$

$$c^2 = b^2 + a^2 \Rightarrow a^2 + b^2 = c^2$$