

# 3 - 4 十字交乘法

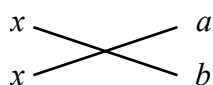
## 主題 4 十字交乘法

### 【觀念一】十字交乘法

(1) 二次項係數為 1

$$\textcircled{1} (x+a)(x+b) = x^2 + (a+b)x + ab$$

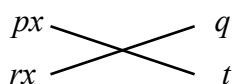
$$\textcircled{2} x^2 + (a+b)x + ab = ( \quad ) ( \quad )$$



(2) 二次項係數不為 1

$$\textcircled{1} (px+q)(rx+t) = prx^2 + (pt+qr)x + qt$$

$$\textcircled{2} prx^2 + (pt+qr)x + qt = ( \quad ) ( \quad )$$

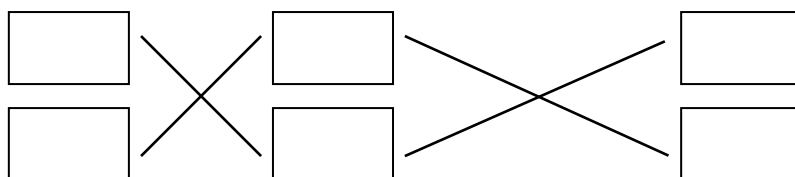


### 【觀念二】雙十字交乘法

(1)  $(lx+my+n)(ax+by+c)$

$$= lax^2 + (lb+ma)xy + mby^2 + (lc+an)x + (nb+cm)y + nc$$

(2)  $lax^2 + (lb+ma)xy + mby^2 + (lc+an)x + (nb+cm)y + nc$



例 1. 完成下列各式因式分解

(1)  $x^2 - 5x - 6 =$

(2)  $2x^2 + 5x - 3 =$