

③ 3/7 x3

$$\Rightarrow (2k_1+1) = (2k_2+1) + 2\Delta x_{12} \frac{2 \cdot (-\Delta_2 + \Delta_1 + 1) (2x_1 y_1 + x_1 + y_1) + (1 + (-\Delta_2 + \Delta_1))}{2x_1 + 1}$$

$$(2k_1+1) = (2k_2+1) + 2\Delta x_{12} \cdot \frac{2 \cdot (-\Delta_2 + \Delta_1) (2x_1 y_1 + x_1 + y_1) + 2(2x_1 y_1 + x_1 + y_1)}{2x_1 + 1}$$

$$+ 2\Delta x_{12} \cdot \frac{(1 + (-\Delta_2 + \Delta_1))}{2x_1 + 1}$$

$$= (2k_2+1) + 2\Delta x_{12} \left[\cancel{(-\Delta_2 + \Delta_1 + 1)} (-\Delta_2 + \Delta_1 + 1) \frac{2 \cdot (2x_1 y_1 + x_1 + y_1) + 1}{2x_1 + 1} \right]$$

$$= (2k_2+1) + 2\Delta x_{12} (-\Delta_2 + \Delta_1 + 1) \frac{2 \cdot [(2x_1 + 1)(2y_1 + 1) - 1] \cdot \frac{1}{2} + 1}{2x_1 + 1}$$

$$= (2k_2+1) + 2\Delta x_{12} (-\Delta_2 + \Delta_1 + 1) \frac{(2x_1 + 1)(2y_1 + 1) - 1}{2x_1 + 1}$$

$$\boxed{(2k_1+1) = (2k_2+1) + 2\Delta x_{12} (-\Delta_2 + \Delta_1 + 1) (2y_1 + 1)}$$

$$(2k_1+1) = 2 \cdot [(2x_1+1)(2y_1+1) - 1] \frac{1}{2} + 1 + 2(x_2 - x_1) (-\Delta_2 + \Delta_1 + 1) (2y_1 + 1)$$

$$2k_1+1 = (2x_1+1)(2y_1+1) - 1 + 1 + 2(x_2 - x_1) (-\Delta_2 + \Delta_1 + 1) (2y_1 + 1)$$

$$(2k_1+1) = (2x_1+1)(2y_1+1) + 2x_2 (-\Delta_2 + \Delta_1 + 1) (2y_1 + 1)$$

$$= (2y_1+1) [(2x_1+1) + 2(x_2 - x_1) (-\Delta_2 + \Delta_1 + 1)]$$

$$(k_1 = \{(2y_1+1) [(2x_1+1) + 2(x_2 - x_1) (-\Delta_2 + \Delta_1 + 1) - 1] \} \frac{1}{2})$$

$$(2k_1+1) = (2y_1+1) 2x_1 + (2y_1+1) + 2(x_2 - 2x_1) (-\Delta_2 + \Delta_1 + 1)$$

$$= (2y_1+1) [(2x_1+1) + 2(x_2 - x_1) (-\Delta_2 + \Delta_1 + 1)]$$

$$= 2x_1 + 1 + 2x_2 (-\Delta_2 + \Delta_1 + 1) - 2x_1 (-\Delta_2 + \Delta_1 + 1)$$

$$=$$

$$(2k_1+1) = 2 \cdot (-\Delta_2 + \Delta_1 + 1) (2x_1 y_1 + x_1 + y_1) + 1 + \cancel{2x_2 (-\Delta_2 + \Delta_1 + 1) (2y_1 + 1)}$$

$$= (-\Delta_2 + \Delta_1 + 1) [2(2x_1 y_1 + x_1 + y_1) + 2(x_2 - x_1) (2y_1 + 1) + 1]$$

$$= (-\Delta_2 + \Delta_1 + 1) [(2x_1+1)(2y_1+1) - 1 + 2(x_2 - x_1) (2y_1 + 1)]$$