

$$x + yz = (x + y)(x + z)$$

$$= xx + xy + xz + yz$$

$$= x + xy + xz + yz$$

$$= x(1 + y + z) + yz$$

$$= x + yz$$

$$(x + y)(x + \bar{y}) = x$$

$$xx + xy + x\bar{y} + y\bar{y}$$

$$x + xy + x\bar{y} =$$

$$x(1 + y + \bar{y}) =$$

$$x =$$

$$(x_1 + x_3 + x_4)(x_1 + \bar{x}_2 + x_3)(x_1 + \bar{x}_2 + \bar{x}_3 + x_4)$$

↑

$$(x_1 + \bar{x}_2 + x_3 + (x_4 \bar{x}_4))$$

$$(x_1 + \bar{x}_2 + x_3 + x_4) \cdot (x_1 + \bar{x}_2 + x_3 + \bar{x}_4)$$

$$(x_1 + x_3 + x_4) \cdot (x_1 + \bar{x}_2 + x_3) \cdot (x_1 + \bar{x}_2 + x_4)$$