Review

- minterms from Truth Table → Canonical SOP
  - Look for 1's in output f: use these minterms
  - all input variables are used in minterms

		x	y	f
m_0		0	0	0
m_1		0	1	0
m_2	$x\bar{y}$	1	0	1 ←
m_3	xy	1	1	1 ←

m-notation or Σ-notation:

$f(x,y) = \Sigma(m_2, m_3)$ $\Sigma(2,3)$

CSOP as Boolean expression:

$f(x,y) = x\bar{y} + xy$

$= x(\bar{y}+y) = x$ ← MSOP

- Maxterms from Truth Table → Canonical POS
  - Look for 0's in output f
  - all input var. are used in Maxterms

		x	y	f
M_0	$x+y$	0	0	0 ←
M_1	$x+\bar{y}$	0	1	0 ←
M_2		1	0	1
M_3		1	1	1

M-notation or Π-notation:

$f(x,y) = \Pi(M_0, M_1)$

CPOS as Boolean expression:

$f(x,y) = (x+y)\cdot(x+\bar{y})$

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

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

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

$= x$ ← MPOS