

SM ADDITION

— OPERANDS HAVE DIFFERENT SIGNS

\Rightarrow ACTUALLY WE PERFORM SUBTRACTION

AN ALGORITHM:

1. COMPARE x_m AND y_m
2. SUBTRACT SMALLER FROM LARGER
3. SIGN OF THE RESULT

= SIGN OF THE OPERAND WITH LARGER MAGNITUDE.

$$x = 29 \quad y = -45 \quad |y| > |x|$$

$$w = |y| - |x| = 16$$

$$\text{sign}(\Delta) = \text{sign}(y)$$

$$\Delta = -w = -16$$

NEED TO KNOW RELATIVE MAGNITUDES

\Rightarrow MORE COMPLEX IMPLEMENTATION
THAN IN COMPLEMENT ADDITION