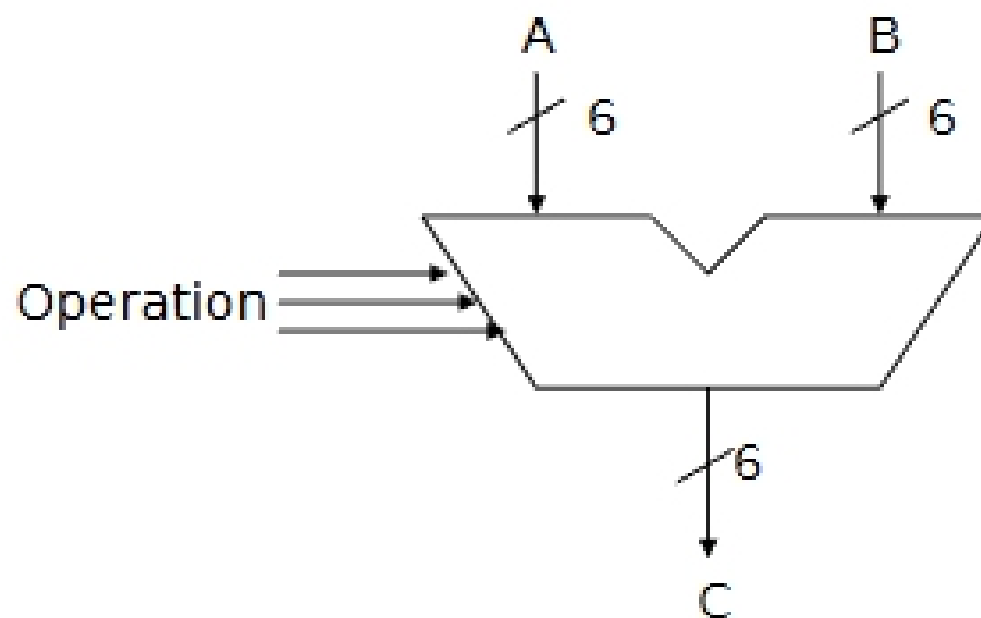


Start with a calculator...

- Integer calculator
 - 6 bits
- Values 0-63
- Operations: +, -, Complement, bitwise logical operations
 - $A+B$, $A-B$, $A \& B$, $A | B$, $A = B$, $\sim B$ (bitwise complement), $-B$ (same as $0-A$), $A \text{ XOR } B$

Calculator Layout



Calculator Bit Design

■ Dominated by addition

	Sum			
	A'B'	A'B	AB	AB'
Cin'	0	1	0	1
Cin	1	0	1	0

	Cout			
	A'B'	A'B	AB	AB'
Cin'	0	0	1	0
Cin	0	1	1	1

