

# Lecture 2: Part II

Circuits Continued

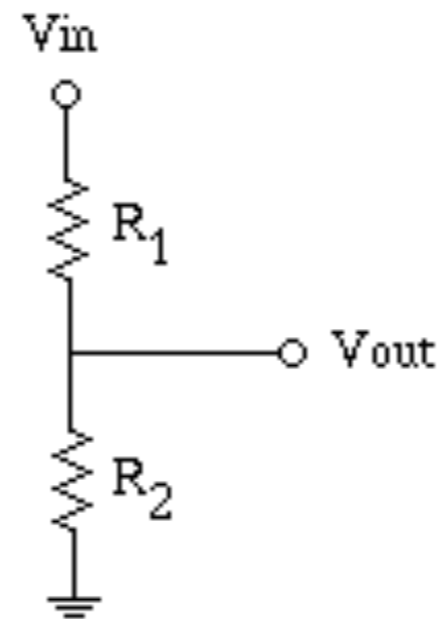
Joel Weingarten

# Homework

Make up (and solve) your own example circuit that minimally requires the solving of three equations and three unknowns.

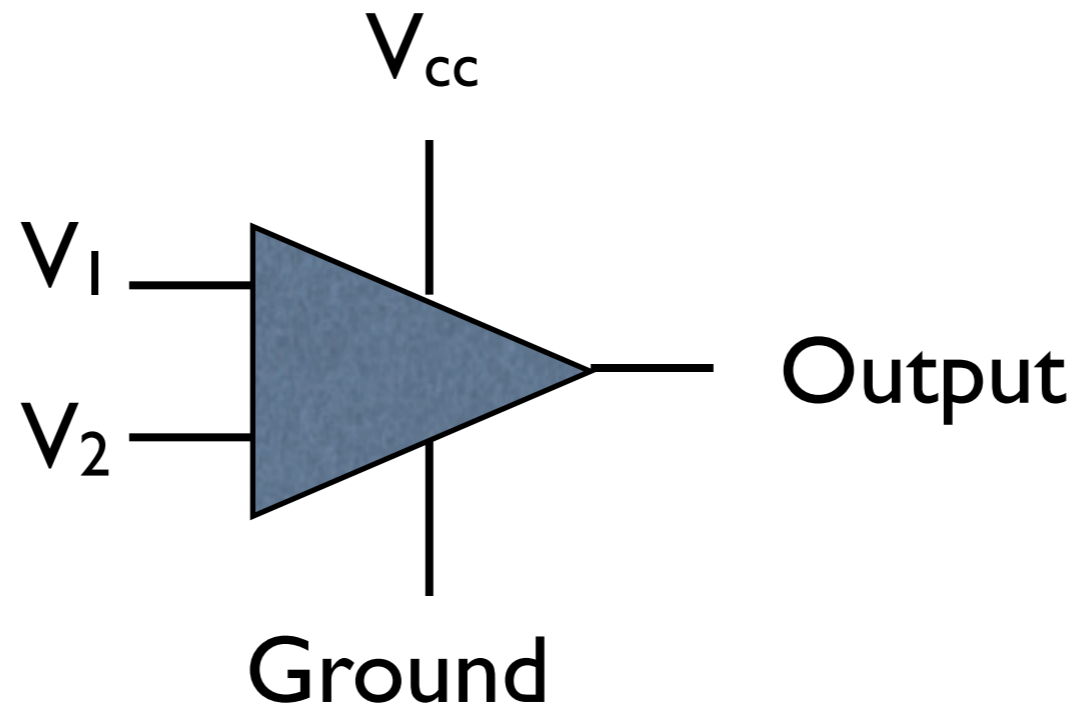
# Voltage Divider

## Voltage Divider



$$V_{out} = \frac{R_2}{R_1 + R_2} V_{in}$$

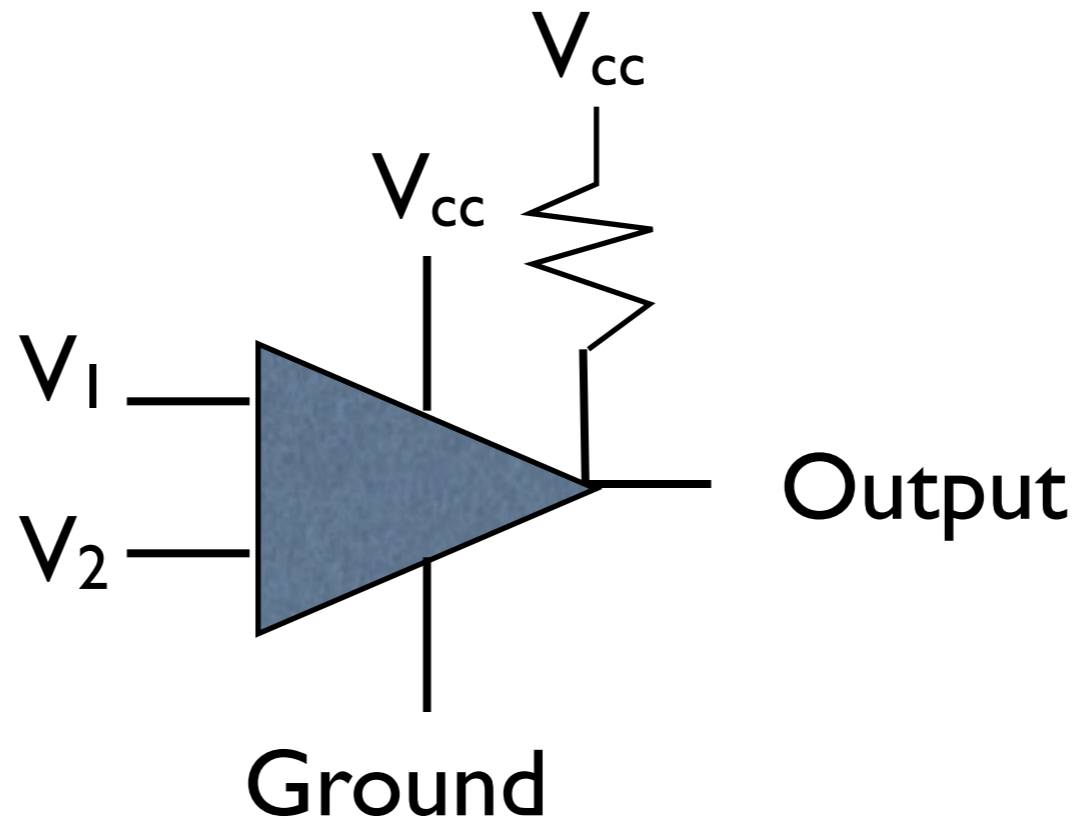
# Comparator



When  $V_1 > V_2$  the output is set to high ( $V_{cc}$ )  
otherwise the output is set to low.

# Comparator Continued

## Open Drain



# Homework

- 1.) What is an Inductor?
- 2.) What's a Capacitor?
- 3.) How does an RLC circuit work
- 4.) How do RLC's relate to MSD's