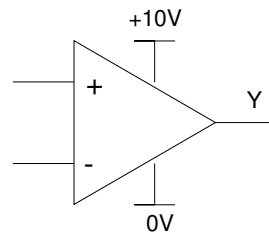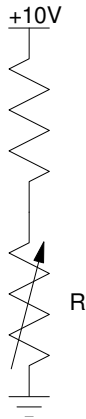# Comparitors and Schmitt Triggers

A thermistor (temperature sensor) has a resistance - temperature relationship of

$$R = 1000 \cdot \exp\left(\frac{3905}{T+273} - \frac{3905}{298}\right) \ \Omega$$

where T is the temperature in degrees Celsius.

Design a circuit so that outputs
- 0V when T < 5C
- 10V when T > 5C

Design a circuit so that outputs
- 0V when T < 5C
- 10V when T > 10C