

# STEAM

## Connecting Mathematics, Art, and Science

STEM Innovators-in-Training Experience Houston

October 5, 2016

George R. Brown Convention Center



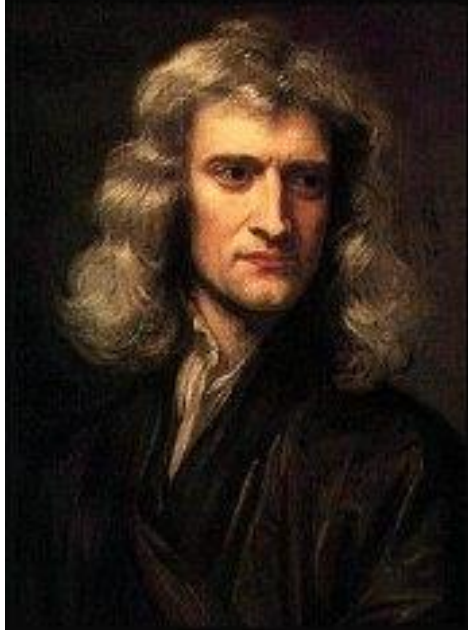
# Rice University School Mathematics Project

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If I have seen further than others, it is by standing  
upon the shoulders of giants.

(Isaac Newton)

# Archimedes of Syracuse



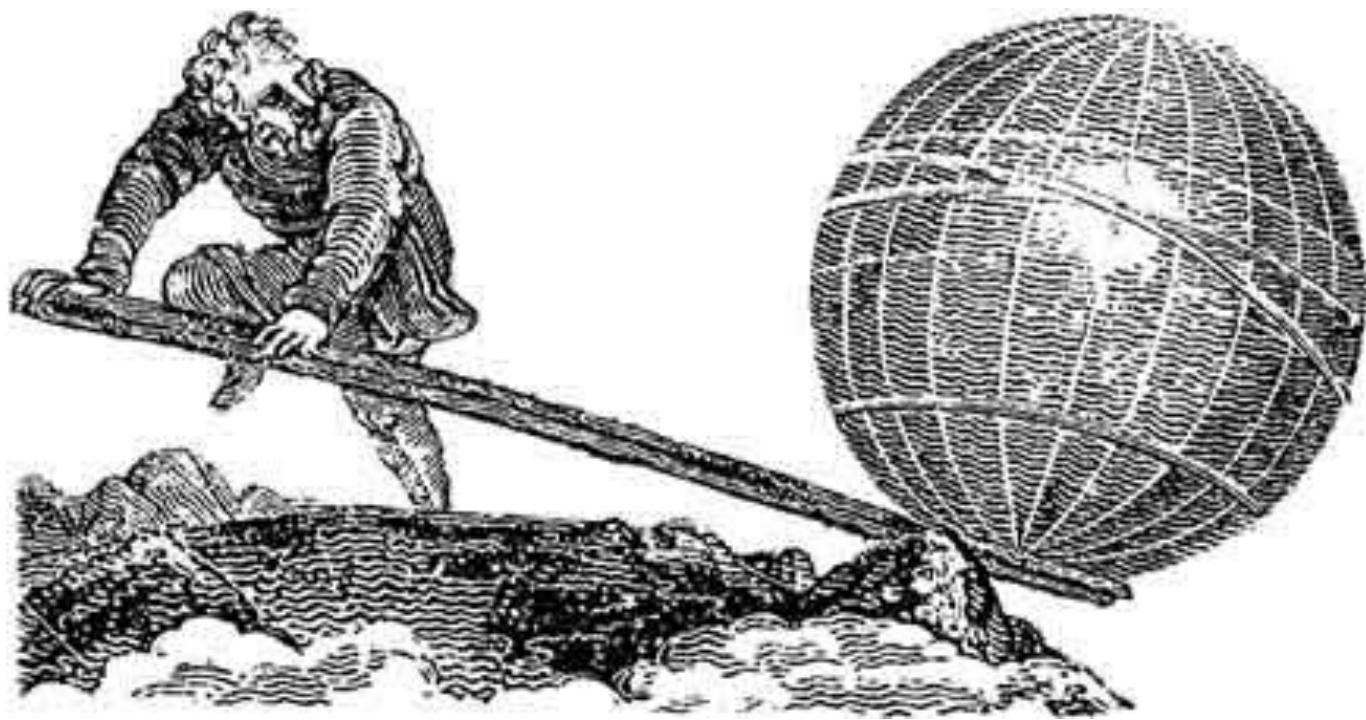
- Ancient Greek mathematician, physicist, engineer, inventor, and astronomer
- Regarded as one of the leading scientists in classical antiquity and maybe of all ages



Give me a lever long enough and a fulcrum on  
which to place it, and I shall move the world.

(Archimedes)

[izquotes.com](http://izquotes.com)



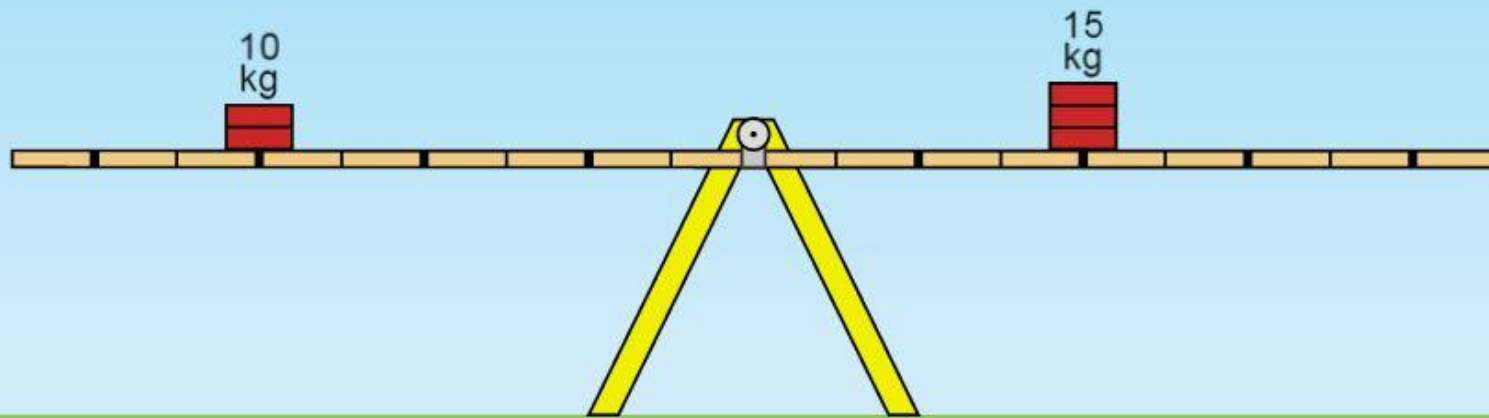
# Archimedes' Law of the Lever

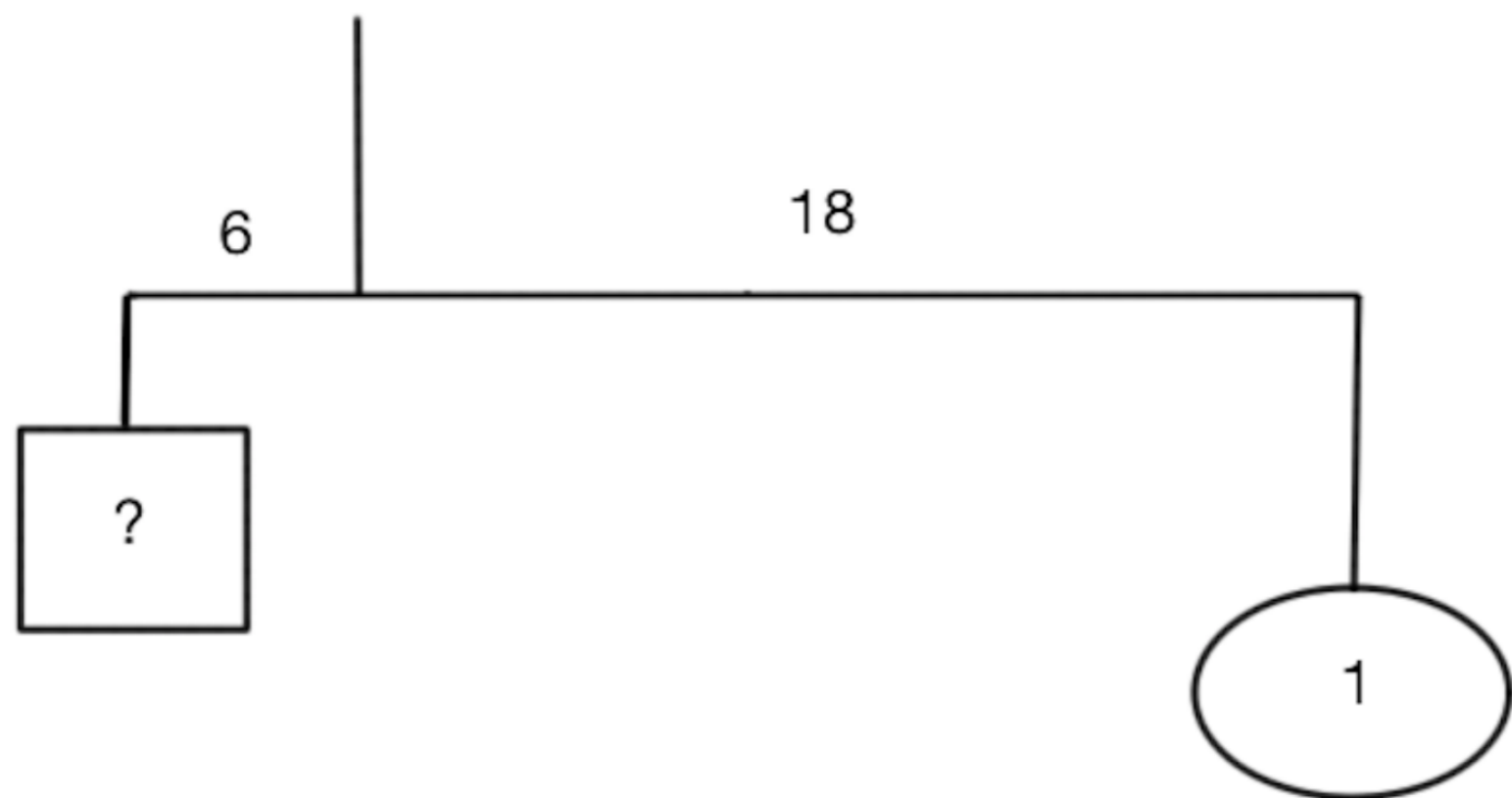
“Magnitudes are at equilibrium at distances reciprocally proportional to their weights.”

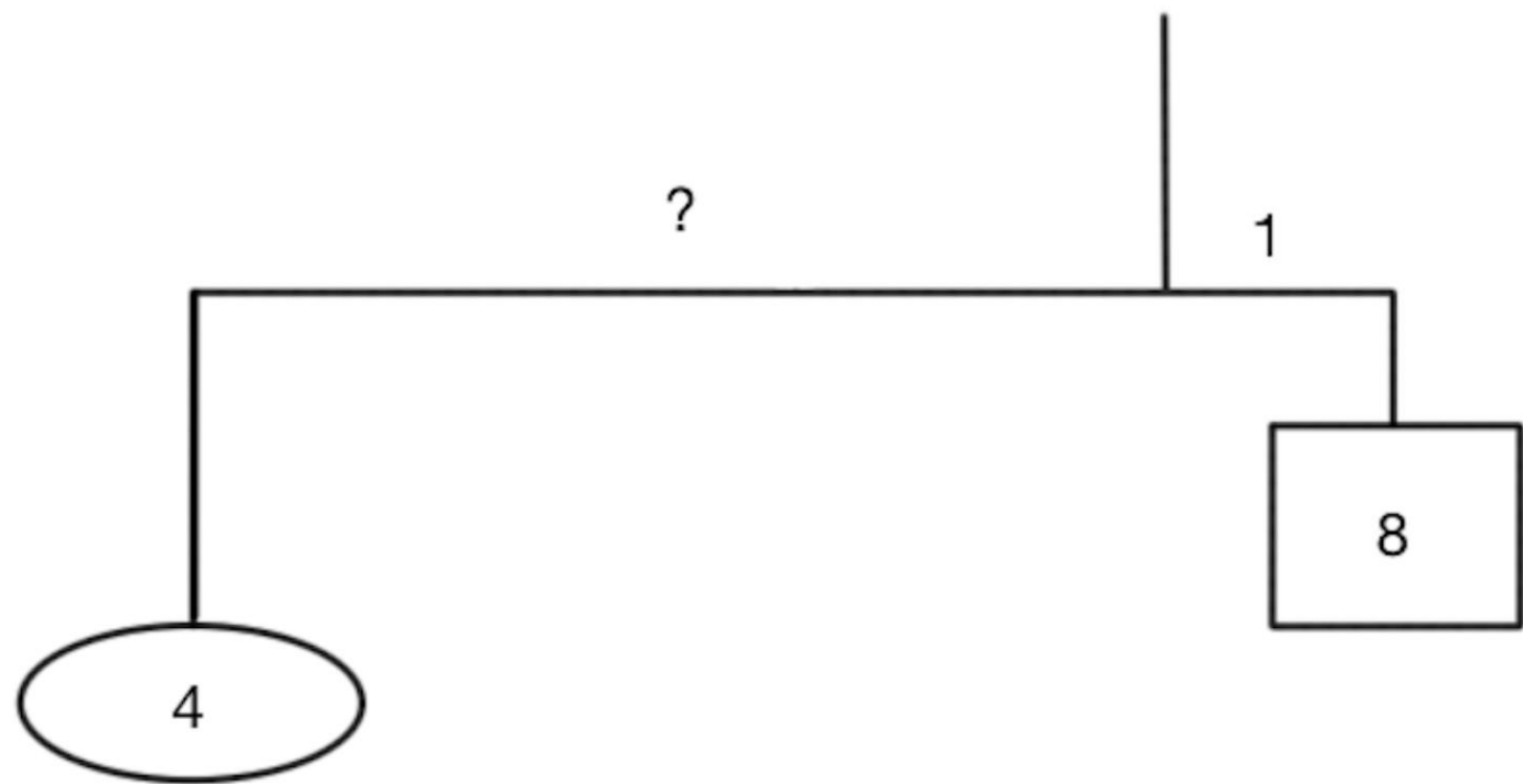
# Archimedes' Law of the Lever

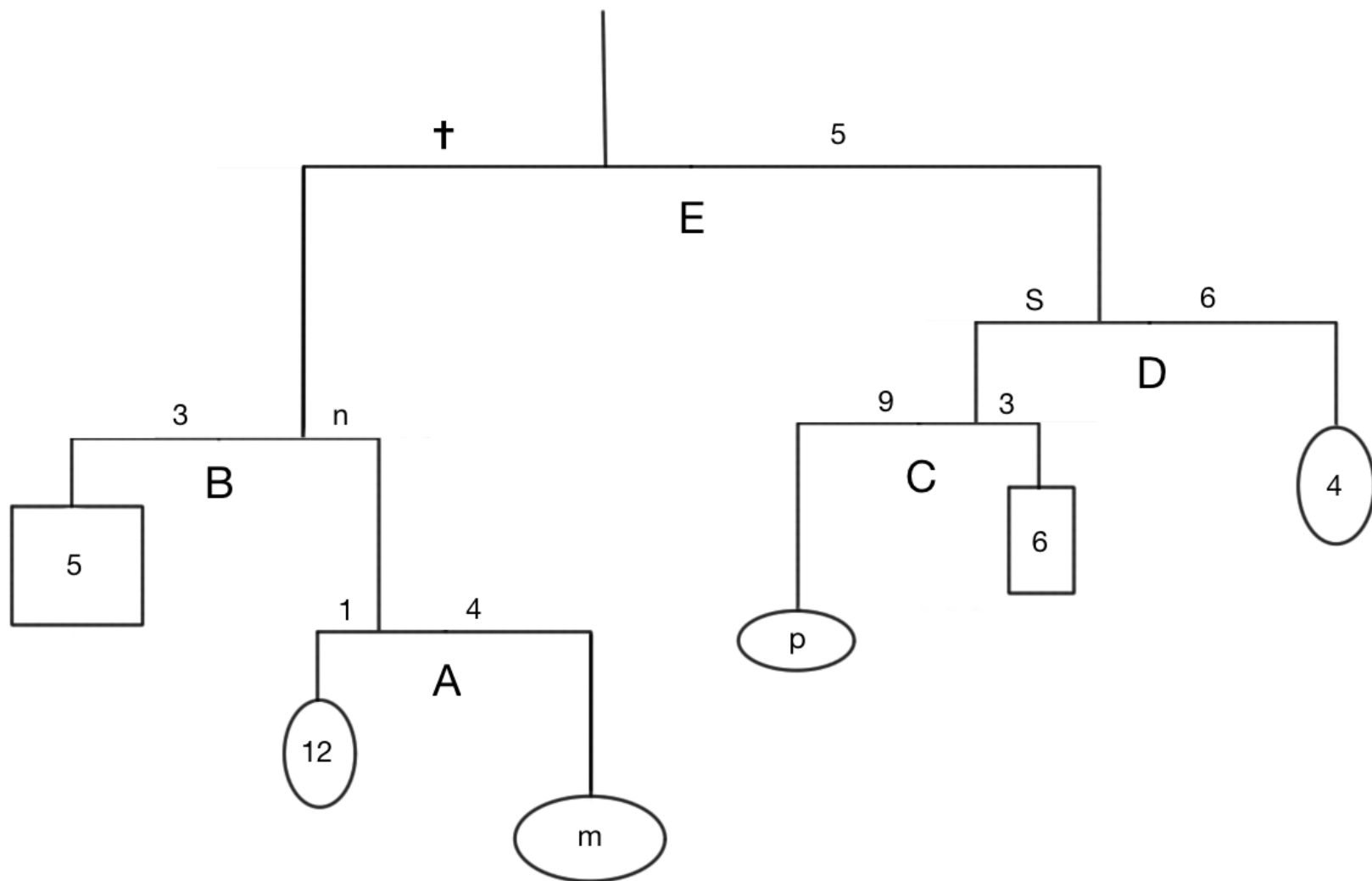
$$W_L \times D_L = W_R \times D_R$$











STEAM > STEM

# Alexander Calder (1898-1976)

- Mechanical Engineer
- Kinetic Sculptures
- Presidential Medal of Freedom







Rice University School Mathematics Project  
<http://rusmp.rice.edu>