

Calculations and Discussion

1. Examine your calculated torques for trials 1, 2 and 3. When rotational equilibrium is achieved, what can you conclude regarding the clockwise torque(s) when compared with the counterclockwise torque(s)? State a general rule describing the condition(s) required for rotational equilibrium.
2. Calculate the percent difference for each of trials 1, 2 and 3 when comparing the sum of the clockwise torques with the sum of the counterclockwise torques? *Note: Percent difference is not the same as percent error. Look up how percent difference is calculated if you are not sure.*
3. Calculate the mass of the metre stick using the measurements from trial 4. Compare this to the mass as measured on the electric balance. Calculate the percent error.
4. What are some likely sources of error that may have caused discrepancies in your results when comparing the torques and masses?