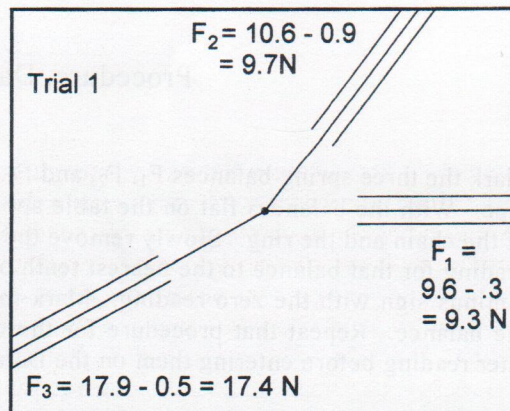


8. Draw in dim lines representing the lines of action of the forces. Assume that each line reaches the dot that marked to center of the ring; and assume that each line should be parallel to the lines marking the sides of the balances. Your diagram should resemble the figure at the right.
9. Draw the three force vectors to scale. Use heavy lines part way along the dim lines of action. Suppose, for instance, that F_1 is 12 N and that your scale is 1 cm $\sim$ 2 N. Then you should represent F_1 by a dark arrow of length = $12 \text{ N} \times 1 \text{ cm}/2\text{N} = 6 \text{ cm}$. Be sure to write down the scale you use. Your figure should now look somewhat like the figure below on the right.



10. Draw the resultant R_{12} of F_1 and F_2 , using the parallelogram method. Refer to Figure 3 if you do not know how to do so with a compass. Label the various forces and angles as indicated in the figure below.

