

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## **Bench Placement**

You are part of a team building a picnic table. You know that the table top needs to be 31" above the ground, and the seat top needs to be 18.5" above the ground. You have decided that the front of the seat will be 4" from the vertical edge of the table top. Your bench will be made of 2 pieces of 2x6 lumber.

The legs will be made of 2x8 lumber. The end of the top of the leg, closest to the center of the table, will be 12" back from the edge of the table.

Make a scaled drawing of the table top, one bench, one cross piece, and one table leg (side view). Make sure you include the ground in your drawing.

How long should the cross pieces be? What angle should we cut the ends of the legs? How long will each leg be?

*Show your work, and write your answer in a complete sentence.*