## Building Height

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1. Choose which partner will be the measurer and which will be the helper. Complete the table by first measuring accurately according to the instructions, and then recording your results.

| Eye-LeVEl Height <br> (IN INCHES) | Distance from <br> BuILDing <br> (IN INCHEs) | Height of Building <br> (IN INCHES) | Height of Building <br> (IN FEET) |
| :---: | :---: | :---: | :---: |
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## Eye-Level Height

Use the tape measure to measure the height from the eyes of the measurer to the ground. This measurement should be rounded to the nearest inch.

## Distance from Building

1. The measurer should hold the clinometer so that the highest point of the building to be measured is visible through the straw.
2. The helper should now instruct the measurer to move backward or forward, until the angle measurement on the clinometers reads $45^{\circ}$. The measurer should make sure to keep the top of the building in sight through the straw while moving.
3. Measure the distance on the ground between the measurer and the building, in inches.


## Height of Building

Add eye-level height to the distance-from-building measurement. Record this measurement in the third column of the table. Then convert the measurement to feet, and record this in the last column.
2. Collect data from the class and record it on the table below. Don't forget to include your data from the first page.

| PAIR | HEIGHT OF BuILDING (IN FEET) |
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3. Using the data in the table above, find the mean, median, and mode of the building height measurements.

Mean:
Median:

Mode:
4. Select one measure of central tendency to report as the building height. Which measure did you choose? Why does this measurement most accurately represent the "average" of the data?
5. Do you think the result is accurate? How could you improve the accuracy of this method of measurement?

