$\qquad$ Name $\qquad$
7.8.1 Homework Set

Date $\qquad$

1. Lin is interested in how many of her classmates watch her favorite TV show, so she starts asking around at lunch. She gets the following responses:

| yes | yes | yes | no | no | no | no |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| no | no | no | yes | no | no | no |

If she asks one more person randomly in the cafeteria, do you think they will say "yes" or "no"? Explain your reasoning.
2. An engineer tests the strength of a new material by seeing how much weight it can hold before breaking. Previous tests have held these weights in pounds:

| 1,200 | 1,400 | 1,300 | 1,500 | 950 | 1,600 | 1,100 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Do you think that this material will be able to hold more than 1,000 pounds in the next test? Explain your reasoning.
3. A company tests two new products to make sure they last for more than a year.

- Product 1 had 950 out of 1,000 test items last for more than a year.
- Product 2 had 150 out of 200 last for more than a year.

If you had to choose one of these two products to use for more than a year, which one is more likely to last? Explain your reasoning.
4. Put these numbers in order from least to greatest.
a. $\frac{1}{2}$
b. $\frac{1}{3}$
C. $\frac{2}{5}$
d. 0.6
e. 0.3

