

Lesson 1 Practice Problems

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.

$\frac{1}{2}$

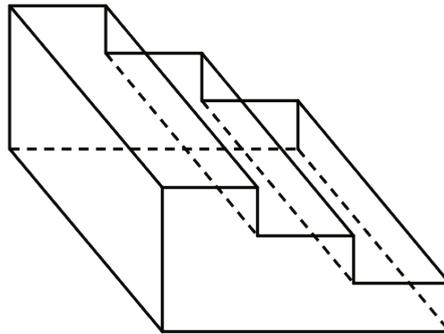
$\frac{1}{3}$

$\frac{2}{5}$

0.6

0.3

5. A small staircase is made so that the horizontal piece of each step is 10 inches long and 25 inches wide. Each step is 5 inches above the previous one. What is the surface area of this staircase?



(From Unit 7, Lesson 15.)