Section 1.3 Rounding Numbers, Estimating Answers and Displaying Information

1. Rounding numbers: In order to round a number to a given decimal place,

1. Note the decimal place in which the rounding is to occur.

2. Locate the digit just to the right of that place.

3. If that digit is less than 5, replace it and all digits to the right of it with zeros.

4. If that digit is 5 or greater, replace it and all digits to the right of it with zeros and then add 1 to the digit in the "rounding place".

Example: Round to the indicated place.

a. 2345 to the nearest ten.

- b. 2345 to the nearest hundred.
- c. 23,954 to the nearest hundred.

2. Rules for rounding in calculations: When you are completing a calculation and are asked to round your answer, do all calculations first without rounding and then round your final answer.

Example: Multiply and round to the nearest hundred. 235(446)

3. Estimating: When estimating the answer to a calculation, use rounded numbers to do the arithmetic. You don't need to round your answer.

Example: Estimate the sum of the three numbers 435, 761 and 997 by rounding each number to the nearest ten.

4. Displaying data: Data can by displayed using tables, pie charts, bar charts, or graphs.

Example: The following table lists the number of calories consumed by eating some popular fast foods.

| Food | Calories |
|---------------------------|----------|
| McDonald's Hamburger | 270 |
| Burger King Hamburger | 260 |
| Jack-in-the-Box Hamburger | 280 |
| McDonald's Big Mac | 510 |
| Burger King Whopper | 630 |
| Jack-in-the-Box Colossus | 940 |

Calories in Fast Food

Make a bar graph displaying this data.