



**Problem 1 – Rounding Fractions**

Press **[LIST]**.

In list **L1**, enter 1 and 2.

In list **L2**, enter the numerator and then the denominator minus the numerator.

L1	L2	L3	2
1	18	-----	
2	-----		
L2(2) = 21 - 18			

Press **[2nd]** **[Y=]** and select **Plot1**. Match the settings as shown at the right.

Press **[GRAPH]**.

The section labeled 1 represents the fraction in the problem. Determine if this section is closer to being the whole circle or just half of the circle.

Plot1	<input checked="" type="checkbox"/>	Off
Type:	<input type="checkbox"/>	<input type="checkbox"/>
CategoryList:	L1	
Data List:	L2	
Number	Percent	

Round each of the following fractions to the nearest  $\frac{1}{2}$  or whole number.

1.  $4\frac{18}{21}$

Answer: \_\_\_\_\_

2.  $2\frac{8}{14}$

Answer: \_\_\_\_\_

3.  $9\frac{2}{5}$

Answer: \_\_\_\_\_

4.  $3\frac{9}{10}$

Answer: \_\_\_\_\_

5.  $3\frac{3}{7}$

Answer: \_\_\_\_\_

6.  $7\frac{1}{5}$

Answer: \_\_\_\_\_

7. How does the percentage of section 1 relate to how you rounded the number?

\_\_\_\_\_

\_\_\_\_\_

8. What do you notice about the two numbers in list L2, when you rounded to the nearest half? When you rounded to the nearest whole number?

\_\_\_\_\_

\_\_\_\_\_



**Problem 2 – Estimating Sums**

Round the two fractions to estimate the sum of each exercise. Then, use the TI-73 to find the exact answer. Remember, use the **UNIT** key to input mixed fractions.

9.  $2\frac{7}{8} + 4\frac{8}{13}$

Round: \_\_\_\_\_

Answer: \_\_\_\_\_

10.  $8\frac{11}{13} + 3\frac{2}{9}$

Round: \_\_\_\_\_

Answer: \_\_\_\_\_

11.  $6\frac{1}{3} + 7\frac{1}{5}$

Round: \_\_\_\_\_

Answer: \_\_\_\_\_

12.  $3\frac{14}{17} + 9\frac{9}{15}$

Round: \_\_\_\_\_

Answer: \_\_\_\_\_

13. Did you have an answer that was very different from your estimate? If so, why do you think this happened? If not, why do you think your estimates were so close?

\_\_\_\_\_

\_\_\_\_\_

**Problem 3 – Estimating Differences**

Round the two fractions to estimate the difference of each exercise. Then, use the TI-73 to find the exact answer.

14.  $9\frac{1}{5} - 2\frac{7}{8}$

Round: \_\_\_\_\_

Answer: \_\_\_\_\_

15.  $6\frac{1}{3} - 3\frac{2}{9}$

Round: \_\_\_\_\_

Answer: \_\_\_\_\_

16.  $4\frac{7}{13} - 7\frac{2}{3}$

Round: \_\_\_\_\_

Answer: \_\_\_\_\_

17.  $8\frac{2}{15} - 3\frac{15}{18}$

Round: \_\_\_\_\_

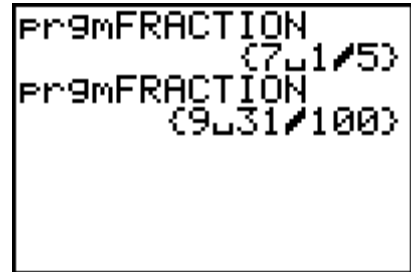
Answer: \_\_\_\_\_



### Problem 4 – Random Rounding

Run the **FRACTION** program twice for each problem. Round each fraction and then estimate the sum and difference.

Example: To run the program, press **PRGM**, scroll to **FRACTION** using **▲** or **▼**, and press **ENTER** to select the program. Once the program name is on the home screen, press **ENTER** to obtain the first fraction. Press **ENTER** again to get the second fraction.



**18.** Fraction 1: \_\_\_\_\_ Round: \_\_\_\_\_  
 Fraction 2: \_\_\_\_\_ Round: \_\_\_\_\_  
 Sum: \_\_\_\_\_ Difference: \_\_\_\_\_

**19.** Fraction 1: \_\_\_\_\_ Round: \_\_\_\_\_  
 Fraction 2: \_\_\_\_\_ Round: \_\_\_\_\_  
 Sum: \_\_\_\_\_ Difference: \_\_\_\_\_

**20.** Fraction 1: \_\_\_\_\_ Round: \_\_\_\_\_  
 Fraction 2: \_\_\_\_\_ Round: \_\_\_\_\_  
 Sum: \_\_\_\_\_ Difference: \_\_\_\_\_

**21.** Fraction 1: \_\_\_\_\_ Round: \_\_\_\_\_  
 Fraction 2: \_\_\_\_\_ Round: \_\_\_\_\_  
 Sum: \_\_\_\_\_ Difference: \_\_\_\_\_