

Name: \_\_\_\_\_ Date: \_\_\_\_\_

# And the Winner Is...

## Adding Fractions and Mixed Numbers

Choose a partner and play a game using a calculator with the fraction boxes shown below. Take turns with your partner and circle two boxes of your choice. Then find the sum of the fractions or mixed numbers in the boxes you chose. Record the answer as a score. Continue playing the game until all of the boxes have been chosen. The player with the highest total score wins!

$\frac{2}{3}$	$2\frac{1}{4}$	$\frac{3}{8}$	$\frac{3}{20}$	$\frac{9}{10}$	$6\frac{1}{12}$
$\frac{7}{9}$	$4\frac{7}{8}$	$1\frac{3}{5}$	$\frac{1}{20}$	$\frac{5}{6}$	$3\frac{3}{4}$
$8\frac{4}{7}$	$\frac{8}{11}$	$\frac{6}{11}$	$9\frac{5}{8}$	$3\frac{4}{5}$	$\frac{9}{11}$
$7\frac{3}{10}$	$\frac{9}{20}$	$5\frac{10}{11}$	$1\frac{1}{5}$	$\frac{9}{16}$	$10\frac{1}{5}$
$\frac{5}{7}$	$7\frac{2}{9}$	$\frac{4}{11}$	$4\frac{7}{12}$	$\frac{1}{9}$	$8\frac{3}{7}$
$4\frac{3}{5}$	$\frac{9}{11}$	$7\frac{3}{7}$	$9\frac{1}{3}$	$\frac{5}{8}$	$3\frac{7}{10}$

### Thinking Cap

What strategies did you use to try to get the greatest possible sum?

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## Adding Fractions and Mixed Numbers

**Objective:** To use the calculator to add fractions and mixed numbers with like and unlike denominators

**NCTM Standards:** Mathematics as Reasoning; Computation and Estimation

### Using the Activity

Students use the calculator in this activity to find the sum of fractions and mixed numbers with like and unlike denominators.

The **b/c** key can be used to enter fractions.

The **a** and **b/c** keys can be used to enter mixed numbers.

**Example** Suppose the first player circles  $8\frac{3}{7}$  and  $\frac{9}{10}$ . The calculator should be used

to find the sum: 8 **a** 3 **b/c** 7 **R-P** **+** 9 **b/c** 10 **=**  $9\frac{23}{70}$ . The player should record this sum and all other sums of the numbers in the two boxes chosen at each turn. Once all of the boxes have been chosen, each player should use the calculator to add all of his or her recorded sums.

**Assessment** Encourage students to check their sums by estimating the sums before finding them on the calculator.

### Answers

*Answers will vary depending upon the boxes chosen by each player*

### Thinking Cap

As an extension, students describe any strategies they used while playing the game. Encourage students to think of other possible strategies they might use if they played the game again.

### Answers

*Possible answer: I tried to choose the two greatest possible numbers from the ones that were left.*