

Name \_\_\_\_\_

### MIXED UP DIGITS

Your challenge is to create addition and subtraction problems using each DIGIT (0, 1, 2, 3, 4, 5, 6, 7, 8, or 9) ONLY ONCE so that the addition problem has the GREATEST SUM and the subtraction problem has the LEAST DIFFERENCE. For each set of digits, create one addition problem and one subtraction problem. Notice that you must use only double and/or triple-digit numbers as indicated in each problem. At the bottom of the page explain your strategy!

Example: Using the digits 1, 2, 3, and 4,  
 The addition problem with the greatest sum is  $41 + 32 = 73$  (or  $42 + 31 = 73$ )  
 The subtraction problem with the least difference is  $43 - 21 = 22$

Use 5, 6, 7, and 8, double-digit numbers only in problem  Addition          Subtraction  $\begin{array}{r} + \\ \hline \end{array}$ $\begin{array}{r} - \\ \hline \end{array}$	Use 9, 5, 1, and 3, double-digit numbers only in problem  Addition          Subtraction  $\begin{array}{r} + \\ \hline \end{array}$ $\begin{array}{r} - \\ \hline \end{array}$	Use 2, 0, 6, and 8, double-digit numbers only in problem  Addition          Subtraction  $\begin{array}{r} + \\ \hline \end{array}$ $\begin{array}{r} - \\ \hline \end{array}$
Use 1, 2, 3, 4, and 5, double and triple-digit numbers only  Addition          Subtraction  $\begin{array}{r} + \\ \hline \end{array}$ $\begin{array}{r} - \\ \hline \end{array}$	Use 6, 7, 8, 9, and 0, double and triple-digit numbers only  Addition          Subtraction  $\begin{array}{r} + \\ \hline \end{array}$ $\begin{array}{r} - \\ \hline \end{array}$	Use 1, 0, 5, 6, and 2, double and triple-digit numbers only  Addition          Subtraction  $\begin{array}{r} + \\ \hline \end{array}$ $\begin{array}{r} - \\ \hline \end{array}$
Use 1, 2, 3, 4, 5, and 6, triple-digit numbers only in problem  Addition          Subtraction  $\begin{array}{r} + \\ \hline \end{array}$ $\begin{array}{r} - \\ \hline \end{array}$	Use 7, 8, 9, 0, 1, and 2, triple-digit numbers only in problem  Addition          Subtraction  $\begin{array}{r} + \\ \hline \end{array}$ $\begin{array}{r} - \\ \hline \end{array}$	Use 2, 5, 4, 0, and 9, double and triple-digit numbers only  Addition          Subtraction  $\begin{array}{r} + \\ \hline \end{array}$ $\begin{array}{r} - \\ \hline \end{array}$

What was your rule for creating an addition problem with the largest sum?

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What was your rule for creating a subtraction problem with the smallest difference?

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