Use the strategies for addition, subtraction and multiplication of the following decimals: N2

## Basic:

1) Estimate and calculate with paper and pencil only:
a) $3.86+1.431=$
b) $12.2-9.65=$
c) $2.95 \times 1.8=$
d) $59.5 \div 0.5=$
2) $3.2+(4.1-2) \times 1.25$
a) 5.825
b) 6.625
c) 14.55
d) 6.1

Use the calculator to solve:
a) $3.846 \times 0.042=$
b) $3 . 7 \longdiv { 7 6 4 . 9 8 }$

Mid Range:

1) Create a division problem with a quotient of 5.6.
2) Create a multiplication problem with a product of 0.24 .
3) Explain how you can use estimation to place the decimal point in each of the following answers.
a) $54.76+35.65=9041$
b) $32.44 \times 1.11=360084$
4) You bought 3 apples at $\$ 0.79$ each, a loaf of bread for $\$ 1.29$ and milk for $\$ 5.75$. If you gave the cashier $\$ 20.00$, how much change would you get?
a) $\$ 25.97$
b) $\$ 10.59$
c) $\$ 12.17$
d) $\$ 9.41$
5) Create two different addition/subtraction word problems.

Each problem must have an answer of 4.2.
6) How many 0.3 L glasses can be filled from a 1.5 L bottle of water?
7) Carole used her calculator to complete each of the following calculations. Should she accept her answer in each case? Why or why not?
a) $24.29 \times 3.8=923.02$
b) $8.9 \times 0.4=3.56$
c) $36.54 \div 2.9=12.6$
d) $8.76 \div 0.4=21.9$
8) Compare the solution of $4 \times 7-3 \times 6$ with the solution of $4 \times(7-3) \times 6$. Are the solutions the same or different? Explain your answer.
9) Use the calculator to answer the following question: Chris found the attendance reports for hockey games at the stadium to be 2787, 2683, $3319,4009,2993,3419,4108,3539$, and 4602. If tickets were sold for $\$ 12.75$ each, and expenses amounted to $\$ 258712$, what was the profit for the stadium?

## High:

(Students have created and solved a realistic word problem)

## 1) Create and solve a percentage word problem that would use $0.25 \times \$ 120$.

2) Mary said to Sharon, "I'm thinking of a number that when multiplied by 8.7 gives a product of about 7.2." Give five numbers that Sharon could Have used to answer Mary's question. Show how Sharon's estimates are reasonable
3) Write a number sentence for each of the following and solve it using the
order of operations.
A) Ms. Janes bought the following for her project: 5 sheets of pressboard at $\$ 8.95$ a sheet, 20 planks at $\$ 2.95$ each, and 2 liters of paint at $\$ 9.95$.
What was the total cost?
B) Three times the sum of $\$ 34.95$ and $\$ 48.95$ represents the total amount of Jim's sales on April 29. When his expenses, which total \$75.00, were subtracted, what was his profit?
4) Because the shift key of the keyboard did not work, none of the brackets appeared in these problems. If you have the right answers to both problems, identify where the brackets must have been. Use calculations to demonstrate the correctness of your answer.

$$
\text { A. } 4+6 \times 8-3=77
$$

B. $26-4 \times 4-2=18$

