ARITHMETIC

This problem requires you to take an arithmetic expression like 5 + 2 - 7 + 9 and determine the result, that is 9. An input file, which must always be called arithmetic.txt, may contain any number of arithmetic problems. Each problem will consist of integers being added or subtracted. The integers may be as large as six digits and the actual arithmetic expression may have up to 20 integers.

The sample output shows the exact form that your program's output must produce.

Sample input data (arithmetic.txt)

Note: There is a space between the numbers and the arithmetic operators

$$4 - 7 + 8$$

$$9 - 7 - 5 - 3 + 2$$

Sample Output:

$$4 - 7 + 8 = 5$$

$$9-7-5-3+2=-4$$

Data Set 1 – Input

Data Set 1 – Output (25 marks each)

$$5 + 10 + 15 + 20 = 50$$

 $22 + 1 + 99 - 4 + 88 + 200 = 406$
 $14 - 56 - 89 + 44 + 290 - 1 + 27 = 229$
 $56 - 123 - 345 = -412$

Data Set 2 – Input

$$12345 - 567 + 837212 - 234561$$

 $5 + 4 + 9 + 7 + 88 + 123 - 4321 + 56789 - 987654 + 4567 + 89654 - 3456 + 876 + 342$

Data Set 2 – Output (50 marks each)

$$12345 - 567 + 837212 - 234561 = 614429$$

 $5 + 4 + 9 + 7 + 88 + 123 - 4321 + 56789 - 987654 + 4567 + 89654 - 3456 + 876 + 342 = -842967$