



Directions for How Grand is Your Total?

Start today by warming up your math brain. Work on the ***How Grand is Your Total*** sheet. There is an extra “master” sheet if you wish to try this with your students.

You may work alone, in pairs, or as a table group.

Pencils are recommended.

Use the digits 0-9 from the 4 columns. You can use any digit up to 4 times. There are four digits out of the 40 that you will be unable to use.

Place the digits wherever you like in the 7 computational problems. As you know, you cannot use “0” in any denominator or as a divisor in division. However, you can use any “0” to create a non-standard format, such as 07 or 007 or 006 or 0040, if that will help you in any way.

Your goal is to generate the answers to the 7 problems and to record those totals in the section on the right.

Add up all your totals to get your grand total. **How grand is your total? Do you want to revise your work in any way?**

Discussion Questions



What surprised you about the arrangement of the digits? Where are the most and least powerful places? Why does that make sense to you?



How did you revise your work? What did you do to create larger subtotals? What ideas did you get from others in your group?



What mathematics did you use to do this activity?

How Grand is Your Total?

sum A		

difference		

product A		

sum B		

9	9	9	9
8	8	8	8
7	7	7	7
6	6	6	6
5	5	5	5
4	4	4	4
3	3	3	3
2	2	2	2
1	1	1	1
0	0	0	0

product B			

product C		

	sum A
	sum B
	difference
	product A
	product B
	product C
	quotient
Grand Total	

quotient		

★ ★ ★ ★ ★
Grand Total