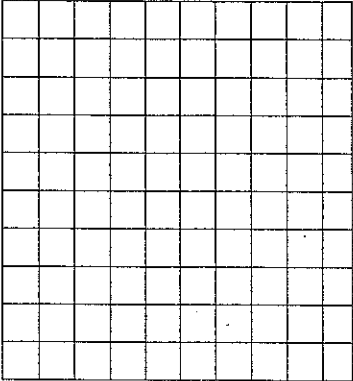
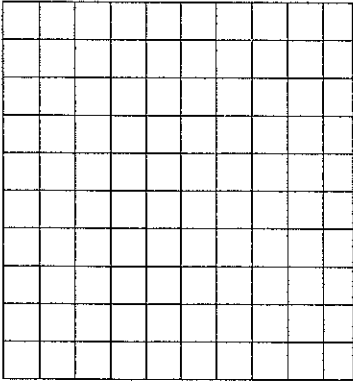
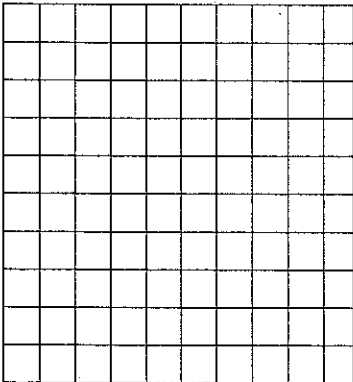


Name: \_\_\_\_\_

Core: \_\_\_\_\_

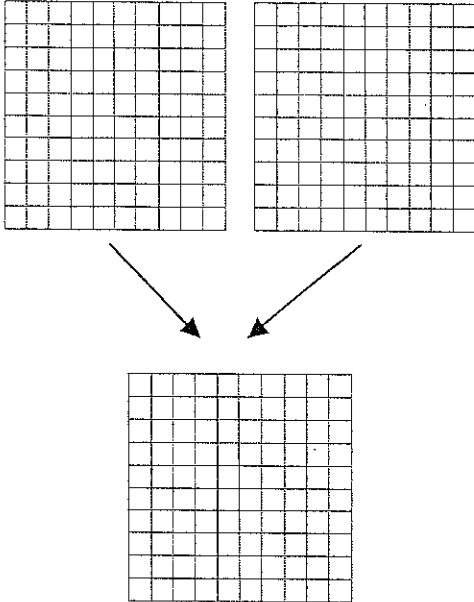
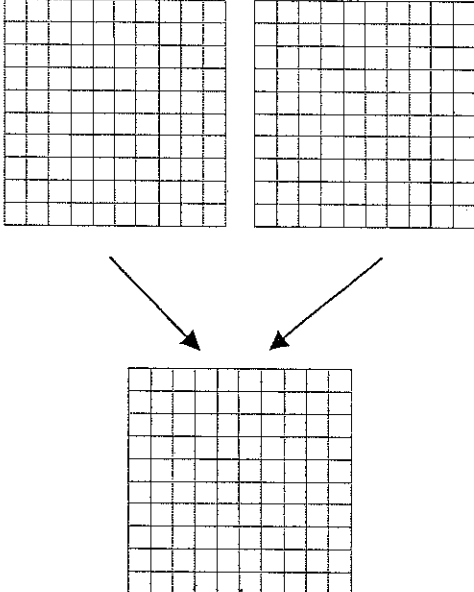
**Homework – Reviewing Fractions and Decimals**  
**Due Friday, February 2nd**

Record each amount in different ways as shown in the first example (picture, words, fraction symbols, decimal symbols).

Picture	Describe 2 ways	Fraction Symbols	Decimal Symbol
	<p><i>3-tenths and 2-hundredths or 32-hundredths</i></p>	$\frac{3}{10} + \frac{2}{100}$ $\frac{32}{100}$	.32
			.08
	<p><i>49-hundredths or 4-tenths and 9-hundredths</i></p>		

# Adding and Subtracting Decimals

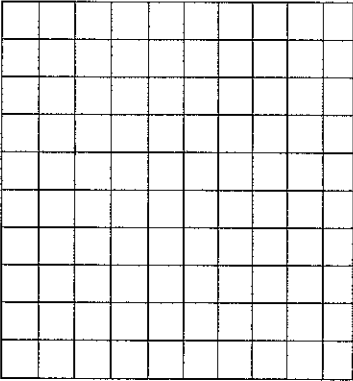
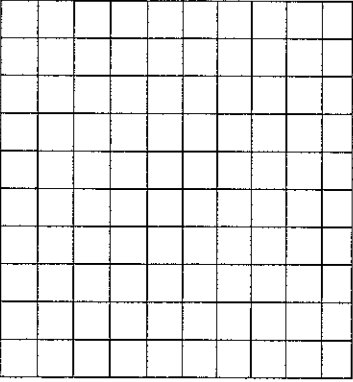
Use the Addition-Subtraction boards to solve #1 and 2, then use only numbers and symbols to write the problem and solution in the third column

Problem	Picture	Using Numbers
1. Add: $0.32 + 0.09$	 <p>The picture shows two 10x10 grids. The first grid has 3 full columns shaded (representing 0.30) and 2 small squares shaded in the 4th column (representing 0.02), totaling 0.32. The second grid has 0 full columns shaded and 9 small squares shaded in the 1st column (representing 0.09), totaling 0.09. Two arrows point from the bottom of each grid to a single 10x10 grid below them, which is currently empty.</p>	
2. Subtract: $0.83 - 0.54$	 <p>The picture shows two 10x10 grids. The first grid has 8 full columns shaded (representing 0.80) and 3 small squares shaded in the 9th column (representing 0.03), totaling 0.83. The second grid has 5 full columns shaded (representing 0.50) and 4 small squares shaded in the 6th column (representing 0.04), totaling 0.54. Two arrows point from the bottom of each grid to a single 10x10 grid below them, which is currently empty.</p>	

In each problem below, circle the larger number, then explain how you know it is larger.

Circle the larger number	Explain how you know it is larger.
3. $\frac{7}{8}$ or $\frac{5}{6}$	
4. 0.63 or 0.309	
5. 0.54 or $\frac{3}{7}$	

Using the given number, record the different ways to show it.

Picture	Describe 2 ways	Fraction Symbols	Decimal Symbol
6. 			0.71
7. 		$\frac{3}{100}$	

# STUDENT HANDOUT

## Stage 1

Because our place value system is based on groups of 10, we can use powers of 10 to help us read, write, and calculate numbers.

- Copy, continue, and complete the table for place values from one through one trillion. Explain your answer for the entries in the "ones" row.

Place Value	Distance From		Standard Notation
	Ones Place	Power of 10	
ones	0		
tens	1	$10^1$	
hundreds	2		
thousands	3		1000

- Answer the questions. Then use standard notation to write a multiplication or division sentence for each. Rewrite each equation using exponential expressions with bases of ten.
  - How many thousands are in one million?
  - How many ten thousands are in one million?
  - How many millions are in one billion?
  - How many billions are in one trillion?
  - How many millions are in one trillion?
  - Describe any patterns you see in the equations with the exponential expressions.

For Problems #3 and #4, show your work, including units. Explain your strategies.

- Answer these questions:
  - How old will you be 1 million seconds from now?
  - How old will you be 1 billion seconds from now?
  - How old will you be 1 trillion seconds from now?
- Answer these questions:
  - If you were 1 million inches from where you are now, where might you be?
  - If you were 1 billion inches from where you are now, where might you be?
  - If you were 1 trillion inches from where you are now, where might you be?