MasterMath

Name _____

Date _____

Closed Book; 60 minutes to complete; show units; show work.

CUCC

1. Estimate the Product, and determine if your estimate is higher or lower or pretty close to the actual answer
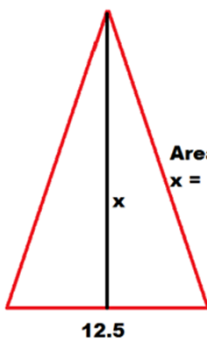
	Rounded	Estimate	high or low or no bias
1.45 x 3.65			
2.89 x 2.95			

2. The bulk candy store sells lemon drops for $4.89 per pound. You want 3.5 lbs. How much will it cost you?

[ ]

3. You spent $15.60 last month on text messages. You sent 78 text messages. How much did each text message cost?

[ ]

4. In 2009, *YouTube* was visited by .12 billion viewers. *Hulu* that year had .038 billion viewers. How many times larger was *YouTube*'s viewer count than *Hulu*'s?

[ ]

5. The area of a triangle is .5 * b * h. The triangle below has an area of 112.5, and a base of 12.5. What is the height (x)?

[ ]

Area (a) = 112.5 = .5 * 12.5 * x

x = 112.5/(.5 * 12.5) = 112.5/6.25

x

12.5

6. Place these numbers in order from smallest to largest:

	6/7	13/14	.875	88%	3/4
convert					
order					

7. Your band is starting to get a lot of offers to play at parties and dances, where you make $25 to play for an hour. Two of your friends have said they'd be your manager. Both would do great jobs. Mattie wants a fee of 15% to book your shows. Ted says he'll do it and keep $5 of the $25. Which one is charging you more?

8. Find the percent of the number:

%	Number	Answer
45%	110	
62%	100	

%	Number	Answer
120%	15	
101%	120	

9. The price of aviation fuel is $5.60 per gallon in the US, and 15% cheaper in Argentina. How much is aviation fuel in Argentina?

10. Bojangle County had 15,000 acres of wetlands in 1950. Today, the amount of wetlands has decreased by 37%. How many acres of wetlands are in Bogangle County today?

11. Estimate the percentage of the number, and tell whether your estimate is higher or lower than the actual answer

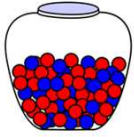| Percent	Number	Estimate	High or Low
49%	150		
24%	12		
61%	60		

12. The car's price is $10,500, but in addition to that, you'll need to pay 4% county tax and 5% state tax. Approximately how much will the car cost you after taxes?

13. What is the ratio of hats to sunglasses?

14. There are 24 students in the class. The ratio of boys to girls is 2:1. How many boys are in the class?

15. Both you and your sister have a collection of 120 marbles. All the marbles are either red or blue. You sister has a ratio of red to blue marbles of 2:3. You have a ratio of red to blue marbles of 3:5. Who has the most red marbles?

| |
| |

16. This table shows the number of hours worked by employees of Fred's Furs. Calculate the mean, median, mode and range for this data set.

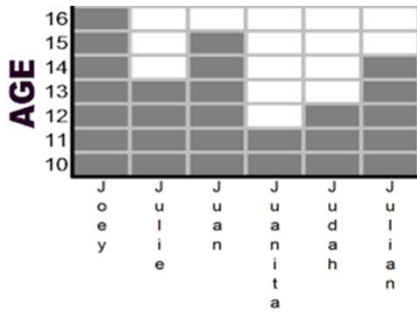| Mean	Median	Mode	Range	Hours Worked	Number of Employees
				7	5
				7.5	4
				8	7
				8.5	6
				9	5

17. This table shows the number of endangered Species in selected states. Find the mean, median, mode and range.

Mean	Median	Mode	Range	State	Number of Endangered Species
				Alabama	123
				Florida	118
				New York	33
				Nevada	40
				New Mexico	48
				N. Dakota	10
				Virginia	66
				California	312

18. Find the mean, median, mode and range. Which measure of Central Tendancy best represents the data?   8, 6, 24, 12, 6, 9

mean	median	mode	range	best

19. Find the mean and median for the data described in this bar graph:

Mean	Median

Results							
%	**?'s**	**# of ?'s**	**Wrong**	**Concept**			
				Multiplying Decimals			
				Dividing Decimals			
				Solve Real World Problems involving Decimals			
				Compare and Order Fractions, Decimals, and Percents			
				Finding the Percent of a Number			
				Estimate Percents for Reasonableness			
				Ratios			
				Rates			
				Mean, Median, Mode, and Range			
				Describe, Analyze, and/or Summarize a Data Set			
				Total			