

MasterMath

Name _____

6th Grade Quarter 1 Exam

Date _____

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

CUCC

1. Please convert the fraction to a decimal:

fraction	decimal
5 1/3	
1/9	

fraction	decimal
21/25	
25/21	

2. When you convert $5/6$ to a decimal, is it a repeating decimal or a terminating decimal?

3. The formula for the area of a triangle is one-half x base x height ($1/2 \times b \times h$). Find the area of a triangle with a base of 16 cm and a height of 12 cm.

4. You are going on a trip to Mexico, and you want to convert your dollars (d) into pesos (p). Your bank tells you that the exchange rate is 11.5 pesos for one dollar. You have \$500 dollars. How many pesos can you get for \$500? Write a formula, then solve.

formula	solution

5. You are now 54" tall. You have been growing $1/4$ " per month. Write an expression to predict how tall (H) you will be after x months.

6. You have been adding 5 friends ("F") per month on Facebook. You now have 12 friends. Write an expression to predict how many friends you'll have after X months.

7. Solve: $3^c - (5 + 2) =$

8. Will y get larger or smaller as x increases: $6 - x = y$

9. Complete the table:

Expression	Numbers	Variables	Operations
$2y - 6$			
$3b + 9$			

10. Use compatible numbers to estimate the answer

$4/7 \times 300$

Is your estimate larger or smaller than the actual answer?

$602 / 300$

11. You shoot 806 free throws, and you make $1/4$ of them. Estimate how many free throws you make.

12. You have 8 cups of flour. It takes $1/3$ cups of flour to make a cookie. How many cookies can you make?

13. The table below shows the portion of your allowance you spend on different items. How many times more do you spend on movies than you spend on snacks?

Expense	Allowance
movies	$1/4$
snacks	$1/8$
others	$1/32$
music	$3/32$
savings	$1/2$

14. McDougal's Burgers sells quarter pound burgers. They start the day with 75 pounds of hamburger meat. How many burgers will McDougals be able to make?

15. Mom throws a party for you and 4 of your friends. She spends \$15 on food. How much does she spend per person (x)?

expression	solution
<input type="text"/>	<input type="text"/>

16. Write an expression and evaluate. $x = 3$, $y = 6$
x more than the product of a number y and 2.

expression	solution
<input type="text"/>	<input type="text"/>

17. Find the product and simplify

$4/5 \times 1/3$

$1 \frac{1}{8} \times 1/3$

18. Your Dad's CD collection has 72 CD's. $1/3$ of them are by U2. How many U2 CD's does your Dad have?

19. $1/3$ rd of the 45 students in a math class are boys. Among the boys, $2/3$ rds are taller than 5'. How many of the boys are taller than 5'?

20. True or False: Does $A = B$?

A	B	equal?
$6 + 8$	$8 + 6$	
$6 - 8$	$8 - 6$	
$5 + x$	$x + 5$	

A	B	equal?
$3 / (5 / 1)$	$(3 / 5) / 1$	
$(8 - 6) - 1$	$8 - (6 - 5)$	
$3 * x$	$x * 3$	

21. Simplify the expression: $8 + 3x + 2x + 4 - 12$

22. Simplify this expression: $3(6 - x) + 22(x + 1)$

23. Write an expression and simplify: 2 times the sum of a number (x) plus 3

Results			
<u>%</u>	<u>?s</u>	<u>Wrong</u>	<u>Concept</u>
	7 - 9		Evaluating Expressions
	5-6,15-16		Writing Expressions
	20-21		Properties of Addition and Multiplication
	22-23		Distributive Property
	3-4		Use Formulas to Solve Problems
	10-11		Estimating with Fractions
	17-19		Multiplying Fractions and Mixed Numbers
	12-14		Dividing Fractions and Mixed Numbers
	1-2		Fraction-Decimal Equivalency
			Total