# JUNIOR DIVISION

Category 1: Arithmetic Fractions

## CALCULATORS NOT ALLOWED

1. (2 pts) What is  $\frac{4}{3}$  of  $10 \frac{1}{8}$ ?

1.

2. (3 pts) Simplify  $\frac{\frac{7}{3} - 4\frac{3}{6}}{\frac{3}{2}}$ 

2. \_\_\_\_\_

3. (5 pts) Find the value of  $\frac{2a}{3b}$  if  $a = \frac{3}{5}$  and  $b = \frac{5}{3}$ 

3.

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# Category 2: Order of Operations

## CALCULATORS NOT ALLOWED

1. (2pts) Simplify 
$$7 - 75 \div (4 + (7 \times 3))$$

2. (3 pts) Find the missing number 
$$8 + 21 \div \times (2 - 3^2) = -13$$

$$\div \qquad \times (2-3^2) = -13$$

2. \_\_\_\_\_

3. (5pts) Simplify 
$$\frac{11-16 \div 8 \times (9 + (4-5^2)) + 10}{(6-4+3)2 \div (6 \div 3)}$$
.

3.

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# Category 3: Percents and Decimals

#### CALCULATORS NOT ALLOWED

1. (2pts) Change the following to the <u>exact</u> percent:

- B. 2.8 = \_\_\_\_

2. (3pts) Arrange these numbers from smallest to largest. Use the letters for your answer.

- a) 88%
- b) 8.80
- c) 0.088
- d) 1.08 e) 0.89%

3. (5 pts) It costs \$16.50 to make a pair of jeans. The store marks the jeans up 80% and that is the price they charge for the jeans on Monday. The next day everything in the store goes on sale for 30% off the price. What is the sale price of the jeans?

Names	School
Category 4:	: Team Word Problems (Pass in only one paper)
1. (2pts) The sum of two numbers is numbers?	374 and one number is 12 more than the other number. What are the two
	1.
2. (3pts.) Amy, Ben and Cathy are to Amy gets. How much does Cathy get	to divide \$108. Ben gets ¾ of what Amy gets and Cathy gets ½ of what?
	2
	t age and his grandfather's current age is 56. In three more years, Mike's Mike will be in four more years. How old is Mike right now?
	3