Name_____   School_____

1. (2 pts)

$$\dfrac{\left(\dfrac{1}{2}+\dfrac{1}{3}\right)\dfrac{1}{4}}{5}$$

1. _____

2. (3 pts) Take $\dfrac{1}{2}$ of $\dfrac{3}{4}$ and add another $\dfrac{3}{4}$ to that. Now divide that by $\dfrac{1}{8}$. How much do you have?

2. _____

3. (5 pts)

$$\dfrac{1}{1-\dfrac{1}{1+2}}-\dfrac{1}{\dfrac{1}{1-2}-1}$$

3. _____

Name_____   School_____

<div align="center">

JUNIOR DIVISION
Category 2: Order of Operations

</div>

1. (2pts) $\dfrac{1}{2}-\left(\dfrac{1}{3}+\dfrac{1}{4}\right)$ 1.

_____

2. (3 pts) $\left[6+5(4-1)-3(7-2)\right]\div 6$ 2. _____

3. (5pts) $\dfrac{2}{3}\left[8-(5-3)(6-3-1)\right]+\dfrac{1}{3}\left[(6\div 3)+3\cdot 4-11\right]$

3. _____

Name_____   School_____

<div align="center">

JUNIOR DIVISION
Category 3: Percents and Decimals

</div>

1. (2pts)   Write $37\dfrac{1}{2}\%$ as a decimal.   1. _____

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

a) 100%   b) 63%   c) 0.6   d) 1.001   e) 0.5%   f) $0.\overline{3}$

2. _____

3. Joe (a used car dealer) bought a car for $1000; he marked it up 25%, sold the car to his friend Jim who he gave a 10% discount. How much did Jim pay for the car?

3. _____

JUNIOR DIVISION
Category 4: Team Word Problems (Pass in only one paper)

1. (2pts) I am thinking of two numbers. The sum of the numbers is 184 and their
        difference is 128. What are the numbers?

1. _____

2. (3pts) It takes 50 minutes to clean 6 rectangular windows which are 9 by 4 feet. How
long will it take to clean 6 mirrors which are 9 by 4 feet rectangles?

2. _____

3. (5pts) Mary selected three bananas and two oranges from a fruit peddler's cart. After
she paid the peddler 28 cents for the fruit, she changed her mind and exchanged an orange
for a banana. "That will cost you another penny" said the peddler. Can you help Mary
figure out the price of oranges and bananas?

3. cost of banana: _____

cost of orange: _____