Rationals Unit End Review Assignment

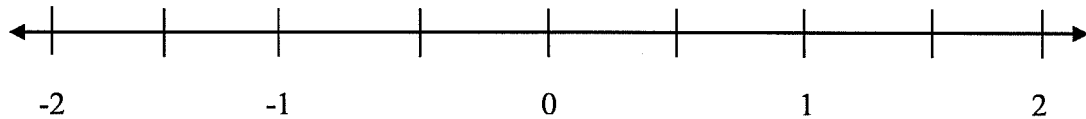**Name:** _____ **Date:** _____ **Total =** **/28**

1. _____ 2. _____ 3. _____ 4. _____ 5. _____ 6. _____

7. _____ 8. _____ 9. _____ 10. _____ 11. _____

1. Place the letters A to C at the appropriate spot on the given number line:

3 marks

$$A = \frac{-3}{4}, \qquad B = \frac{5}{3}, \qquad C = 0.5,$$

-2   -1   0   1   2

2. Evaluate:

3 marks   *3 marks*

$$\left(\frac{1}{3}+\frac{3}{7}\right) \div \left(2-\frac{-2}{7}\right) =$$

$$2\frac{1}{4} - \left(-3\frac{7}{8}+5\right)\left(\frac{4}{9}-3\right)$$

Complete the following questions related to Mary's salary.

Mathematics and Everyday Life
Mary earns an annual salary of $36 000.
Complete the following questions related to Mary's earnings.

- Mary has prepared a budget based on her annual salary. Complete Mary's budget statement.

3 marks

Expense	Fraction of Annual Salary	Amount
Housing and Food	$\frac{1}{2}$	
Savings	$\frac{1}{12}$	
Transportation (Car Payments, Gas, Insurance)	$\frac{1}{6}$	

- What fraction of Mary's money is left over for other expenses if she spends $\frac{1}{2}$ of her money on housing and food, $\frac{1}{12}$ of her money on savings, and $\frac{1}{6}$ of the total on transportation?

2 marks

- Mary spent $4500 of her annual salary on entertainment. Express this amount as a percent of her annual salary to the nearest tenth.

1 mark

Numerical Response

- Record your answer in the boxes provided.
- Enter the first digit of your answer in the left-hand box and leave any unused boxes blank.

Example 1

Calculate: $(6 + 10) \div 2 - (2 + 3)$
Solution: *3*

3			

Example 2

A $11 calculator is marked $\dfrac{1}{4}$ off. Calculate the discount you will receive.

Solution: *$2.75*

2	•	7	5

1. Evaluate: $24 + 6 \times 9 - 8 \div \dfrac{1}{2} =$

Use the following information for the next question.

Brad was comparing four different rational numbers:

Number 1:   0.4

Number 2: $\dfrac{21}{50}$

Number 3: $\dfrac{5}{12}$

Number 4:   0.426

2. Brad determined the biggest number in the list to be *Number* _____.