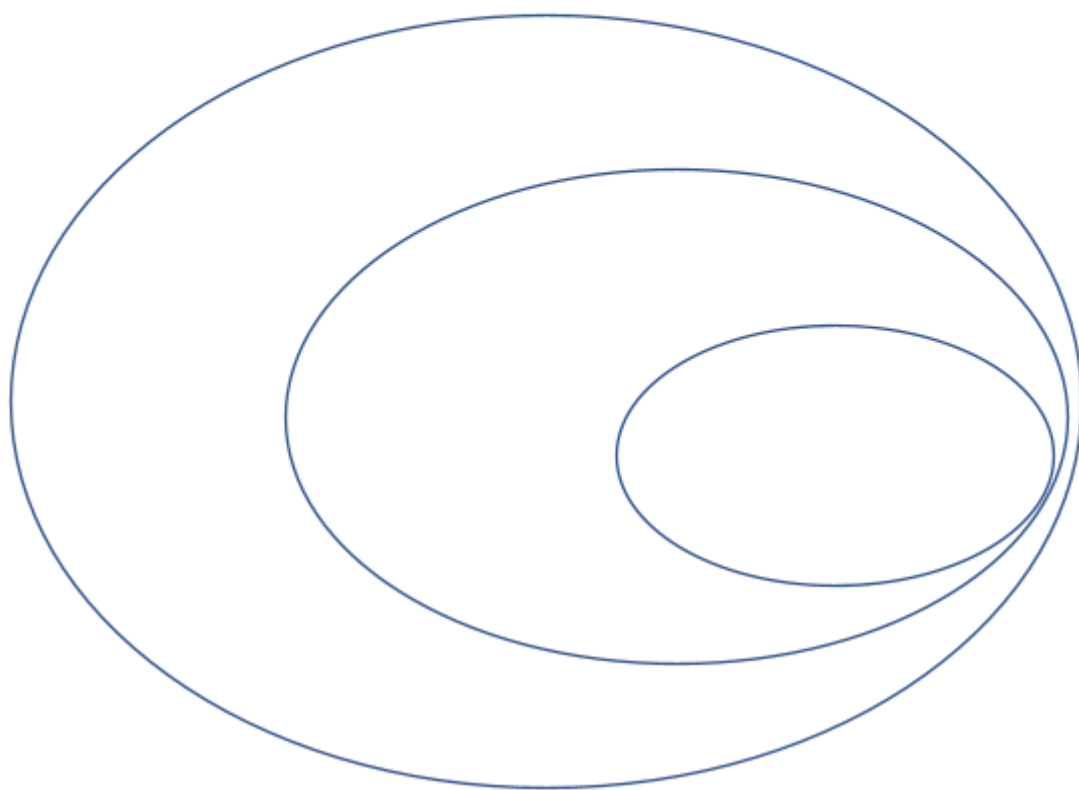


Name: _____

7M – U1 Rational Numbers Study Guide

Label the Venn Diagram properly with the word bank. Then classify the below numbers into the SMALLEST POSSIBLE CATEGORY that they fit into.

Word Bank:		Natural Numbers		Integers		Whole Numbers	
Rational Numbers							
12	-7	0	0.725	-2.43	3	5	-1



Conversion Problems: Convert the following numbers into their opposite notation (decimals to fractions, fractions to decimals, percents to fractions)

1. 0.275

2. $0.\overline{8}$

3. 24%

4. $1.\overline{42}$

5. $-\frac{5}{9}$

6. $3.\overline{45}$

For the below problems, create a number line for the given range. Provide the scale you used:

7. $-\frac{2}{3}$ to $2\frac{1}{3}$

Scale:

8. -1.4 to 0.8

Scale:

Compare the following rational numbers. Use a number line if needed.

9. 0.28 and $\frac{1}{8}$

10. $\frac{3}{12}$ and $\frac{7}{18}$

11. -1.42 and -1.57

12. Order the below set from least to greatest. Use a number line if needed.

$$\{\frac{1}{8}, 14\%, 0.09, 0, -\frac{2}{12}\}$$

Solve the below rational number operations problems. SHOW ALL OF YOUR WORK

13. $-\frac{2}{7} - \frac{6}{7} =$

14. $\frac{7}{12} + \frac{-3}{12} =$

$$15. \frac{-12}{18} + \frac{-6}{18} =$$

$$16. \frac{3}{8} - \frac{9}{12} =$$

$$17. \frac{5}{6} \cdot -\frac{2}{3} =$$

$$18. -\frac{1}{4} \cdot -8\frac{4}{9} =$$

$$19. \frac{\frac{4}{7}}{\frac{9}{13}} =$$

$$20. -4\frac{6}{13} \div \frac{9}{12} =$$

$$21. -5.37 \cdot -3.9 =$$

$$22. 23,244 \div -2.4 =$$