

**Pre-Algebra, Unit 01 Practice Test: Rational Numbers and Decimal Expansion**

Name: \_\_\_\_\_

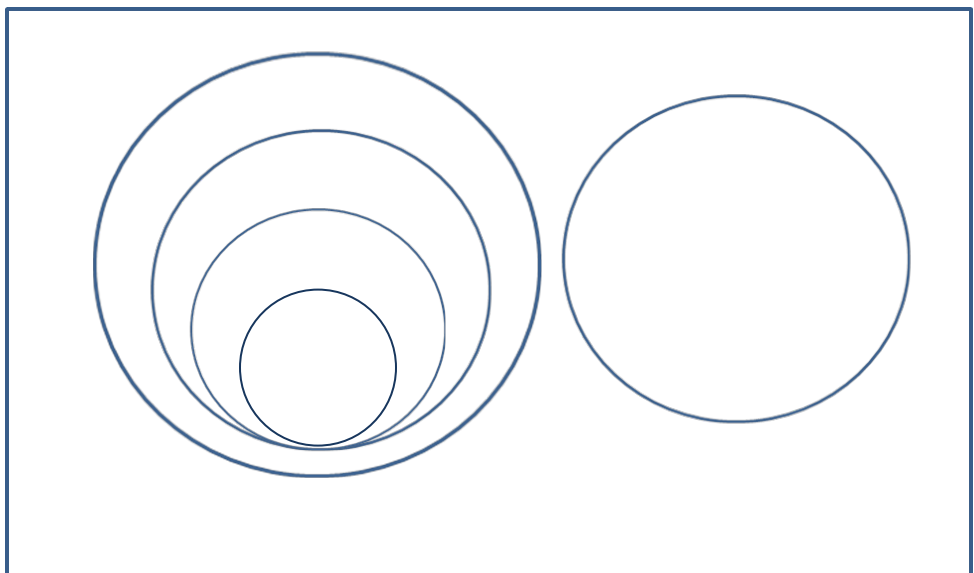
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1. Define *rational number* and give an example.
  
  
  
  
  
  
  
  
  
  
2. Define
  - a) *repeating decimal* and give an example.
  
  
  
  
  
  
  
  
  
  
  - b) *terminating decimal* and give an example.

3. **Label** the Venn Diagram with the following: *Integers, Irrational Numbers, Natural Numbers, Real Numbers, Rational Numbers, and Whole Numbers.*

**Give one example** of each type of number.



4. (SE/SBAC) What is the decimal expansion of the number  $\frac{5}{12}$ ? Show your work. Is the number  $\frac{5}{12}$  rational or irrational? Explain.

5. (SE) Which number is NOT equivalent to

$$3\frac{3}{11}?$$

- A.  $\frac{36}{11}$
- B.  $3\frac{6}{22}$
- C.  $3.2\overline{7}$
- D.  $3.\overline{27}$

6. (SE) Which number is equivalent to 0.65 ?

- A.  $\frac{1}{65}$
- B.  $\frac{13}{20}$
- C.  $\frac{5}{6}$
- D.  $\frac{13}{2}$

7. (SE) What is the decimal equivalent of  $-\frac{11}{6}$  ?

- A. 0.54
- B.  $0.5\overline{4}$
- C.  $-1.8\overline{3}$
- D.  $-1.\overline{83}$

8. (SAT)  $\frac{3 + \diamond}{2} = 7\frac{1}{2}$

What number, when used in place of  $\diamond$  above, makes the statement true?

- A. 15
- B. 12
- C. 5
- D. 4

9. (SBAC/SE) Put a check in all of the columns that apply for each number.

Number	Integer	Rational	Irrational	Real
$\frac{3}{7}$				
$\sqrt{15}$				
$\pi$				
-3				

10. (SE) Write  $0.\overline{63}$  as a fraction. Show and explain each step.

11. (SBAC) Write  $3.0\overline{6}$  as a fraction. Show your work.

