

Practice Worksheet
 Content Standard: Language of Algebra
 Student Learning Expectations: Real number system

1. Fill in the names of the sets:

<p style="text-align: center;">_____</p> <p style="text-align: center;">$\frac{1}{3}$ $.5$</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px; text-align: center;"> <p style="text-align: center;">_____</p> <p style="text-align: center;">...-3, -2, -1</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px; text-align: center;"> <p style="text-align: center;">_____</p> <p style="text-align: center;">0, 1, 2, 3...</p> </td> </tr> </table> </td> </tr> </table>	<p style="text-align: center;">_____</p> <p style="text-align: center;">...-3, -2, -1</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px; text-align: center;"> <p style="text-align: center;">_____</p> <p style="text-align: center;">0, 1, 2, 3...</p> </td> </tr> </table>	<p style="text-align: center;">_____</p> <p style="text-align: center;">0, 1, 2, 3...</p>
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2. Which one of the following paired sets of numbers contains **only** rational numbers?

- a. {1.25, 9}
- b. $\{\sqrt{2}, -1\}$
- c. $\{\pi, -4/5\}$
- d. $\{1/3, \sqrt{3}\}$

3. Which number set would include -6 but not $2/3$? _____

4. Which of the following is an irrational number? _____

- a. $-a$
- b. $\frac{1}{4}$
- c. $\sqrt{7}$
- d. $30/4$

5. Which of the following expressions represents the smallest number? _____

- a. $(\frac{1}{2})^{-10}$
- b. $2,010 \times 10^{-8}$
- c. 0.0000000576×10^2
- d. $(\frac{1}{20}) \times (\frac{1}{20}) \times (\frac{1}{20})$

6. What name is given to the set of numbers that can all be written as fractions, $\frac{a}{b}$, where a and b are both integers and b is not zero? _____

7. If x represents the number of people attending a band concert, what set of numbers most accurately describes the number x? _____

8. Which of the following is an integer? _____

- a. $\sqrt{2}$
- b. 3
- c. 5.4
- d. $6\frac{2}{3}$