Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Parent Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Rational/Irrational Numbers and Scientific Notation**

**Test Review**

Determine if the following numbers are rational (r) or irrational (i)

1. 6.23232323 \_\_\_\_ 2. \_\_\_\_ 3. - \_\_\_\_ 4. \_\_\_\_ 5. \_\_\_\_

Write the following decimals as fractions in lowest terms. Do not use a calculator and you must show your work.

1. 8.25 2. 0.333333333 3. 2. 4. 3.151515152

Identify and label the following on the number line below.

, 3.75, 3, , , , π,

| l | l | l | l | l | l |

0 1 2 3 4 5 6

How many times greater?

1. 4.02 x 106 is about \_\_\_\_\_\_\_\_\_\_\_\_ times greater than 2.15 x 104

2. 10.34 x 106 is about \_\_\_\_\_\_\_\_\_\_\_\_times greater than 4.91 x 103

3. 6.02 x 105 is about \_\_\_\_\_\_\_\_\_\_\_\_\_\_ times greater than 3.05 x 105

Write the following in scientific notation or standard notation.

|  |  |  |
| --- | --- | --- |
| Standard Notation | Scientific Notation | Calculator Notation: |
| 1. 538,000 |  |  |
| 2. 0.000552 |  |  |
| 3. | 2.0335 x 10-3 |  |
| 4. 4,290,000 |  |  |
| 5. | 9.26 x 104 |  |
| 6. | 9.098 x 10-6 | 9.098E-6 |

Write your answers in scientific notation.

1. (6.3 x 104) **+** (1.5 x 105)= 2. (5.4 x 106) **–** (1.6 x 105) =

3. (5.25 x 10-2) (5 x 103) = 4. (6.9 x 105) ÷ (3 x 104) =