**Part 1: Real Numbers (Rational/Irrational Numbers, Square Roots)**



1. Which fraction is equivalent to $0.5\overbar{21}$?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| $$\frac{521}{999}$$ | $$\frac{705}{990}$$ | $$\frac{5205}{9990}$$ | $$\frac{258}{495}$$ | $$\frac{615}{990}$$ |

2.



3.



|  |  |  |  |
| --- | --- | --- | --- |
| ***Q*** | ***R*** | ***S*** | ***T*** |

4. Convert $0.\overbar{381}$ to a fraction in simplest form.

5.



6.



7.



**Part 2: Exponents and Scientific Notation**

8.



9. Maggie is trying to solve a homework problem. She has to arrange numbers that are expressed exponential form. Place the number in order from least to greatest.

$10^{6}$, $10^{12}$, $10^{-3}$, $0$, $10^{-5}$, $10^{2}$, and $10^{5}$

10.



11.



12.



**Part 3: Pythagorean Theorem**

13.



14.



15. What is the distance between $\left(-3,0\right) and \left(2,-4\right)?$

