Formative assessment: scientific notation

Test A

Number Sense: Rational and Irrational/ Exponerts/Sciertitic Notation

Name: _____

Date: _____ TB: _____

1. Circle all of the following that describe the number: 6.54…

a. Terminating   c. Repeating

b. Rational   d. Irrational

2. Is the √9 rational or irrational? Justify your answer.

3. Simplify: $10x^4 \times 4x^3$

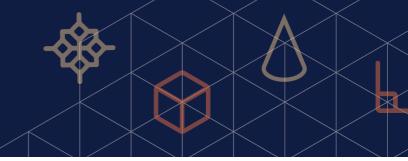4. Simplify: $5^4/5^2 =$

5. Billy says $(2b^5)^3 = 8b^8$. Is Billy right? How do you know? Justify your answer.

6. Put into expanded form:

a 4.12 x 10^{-3}

b.902 x 10^7

7. Put into scientific notation:

a. .000045

b. 542,000,000

8. 4.5 x 10^8 + 5.6 x 10^8 =

9. (3.1 x 10^6) (2 x 10^4) =

Planet	Circumference of Planets (m)
Earth	4.00 x 10^8
Moon	1.92 x 10^8
Mars	2.13 x 10^8
Jupiter	4.39 x 10^9
Saturn	3.67 x 10^9
Pluto	7.23 x 10^7

10. What is the sum of the circumference of Earth and the Moon?

11. What is the difference in circumference between Jupiter and Pluto?

12. If you were to square the circumference of Earth, would it be bigger than Jupiter? Prove your answer.

13. A basketball is 4.0 x 10^{-2} m in circumference. How many times larger is the Earth than a Basketball?