

Unit 1 Review: Number Theory

Name _____

Date _____ Block _____

Name the property illustrated. Use the word bank to write the full name of the property. Write the full name of the property or points will be deducted.

Associative Property	Commutative Property
Additive Identity	Multiplicative Identity
Additive Inverse	Multiplicative Inverse
Zero Property	Distributive Property

1.) $5 \cdot (3 \cdot 4) = (5 \cdot 3) \cdot 4$

2.) $6 + 3 = 3 + 6$

3.) $2(5x + 8) = (2 \cdot 5x) + (2 \cdot 8)$

4.) $4 + 7 + (-4) = 7 + 0$

5.) $12 \cdot 1 = 1 \cdot 12$

6.) $18 \cdot 2 = 2 \cdot 18$

7.) $6 \cdot \frac{1}{6} = 1$

8.) $(7)(0)(5) = 0$

9.) $4x \cdot (3y \cdot 2) = (4x \cdot 3y) \cdot 2$

10.) $7 + (12 + 3) = (7 + 12) + 3$

**Know how to apply these properties.*

Name all of the subsets for which each number belongs. (rational (Q), integer (Z), whole (W), natural (N), irrational (I))

11.) -14 _____

12.) 0 _____

13.) 0.56312... _____

14.) $\frac{4}{5}$ _____

15.) 32 _____

16.) $\sqrt{5}$ _____

17.) $-\frac{1}{2}$ _____

18.) π _____

Evaluate.

19.) $6^0 =$ _____

20.) $5^5 =$ _____

21.) $10^{-4} =$ _____

22.) $10^{-1} =$ _____

23.) $\sqrt{64} =$ _____

24.) $\sqrt{196} =$ _____

25.) $\sqrt{400} =$ _____

26.) $\sqrt{25} =$ _____

Write the following in scientific notation or in standard form.

27.) $5 \times 10^2 =$

28.) 1,230,000 =

29.) $1.2 \times 10^{-3} =$

30.) $3.75 \times 10^7 =$

31.) 0.0000000042 =

32.) 2,000,000,000 =