Arithmetic Properties: Practice Activity

Directions: Read and answer the following questions to assess your knowledge of arithmetic properties.

1. Look at this number: 3,042,567
   a. What is the place value of the 4 in this number?

   b. Which digit of this number is in the hundreds spot?

2. Consider this number: 5,089,321
   a. What is the place value of the 5 in this number?

   b. What digit of this number is in the thousands spot?

3. Consider this number: 8,763,214
   a. What is the place value of the 1 in this number?

   b. What digit of this number is in the millions spot?

4. Bonus: If the place values go "ones, tens, hundreds, thousands, ten thousands, hundred thousands, millions…" what two places come next?

5. Solve this expression using the order of operations: (3+4) x (5-3)

6. Solve this expression using the order of operations: (5x7²) ÷ (0+5)

7. Solve this expression using the order of operations: 2(6x8²)²

8. Is 3.8 rational or irrational?

9. Is √(2 ÷ 5) rational or irrational?

10. Is -5 rational or irrational?

11. Is π rational or irrational?

12. Is 0.30300300003 rational or irrational?

13. Is 4/5 rational or irrational?

14. Is $\sqrt{(}8$ rational or irrational?

15. Is -4 rational or irrational?

16. What arithmetic property is this? 6 x (⅙) = 1

17. What arithmetic property is this? <u>7(5+4)</u> = 63
   Hint: (7 x 5)+(7 x 4) is one way to solve this. Why? (what property is used)

18. What arithmetic property is this? (3 x 4) x 2 = 3 x (4 x 2)

19. What arithmetic property is this? 2 + 0 = 2

20. What arithmetic property is this? 4 x 5 = 5 x 4

Answers

1. Look at this number: 3,042,567
    a. Ten thousands
    b. 5

2. Consider this number: 5,089,321
    a. Millions
    b. 9

3. Consider this number: 8,763,214
    a. Tens
    b. 8

4. Ten millions, hundred millions

5. $(3+4) \times (5-3)$
    a. $(3+4) \times (5-3)$
    b. $(7) \times (2)$
    c. **<u>14</u>**

6. $(5 \times 7^2) \div (0+5)$
    a. $(5 \times 7^2) \div (0+5)$
    b. $(5 \times 49) \div (0+5)$
    c. $(5 \times 49) \div (5)$
    d. $(245) \div (5)$
    e. **<u>49</u>**

7. $2(6 \times 8^2)^2$
    a. $2(6 \times 8^2)^2$
    b. $2(6 \times 64)^2$
    c. $2(384)^2$
    d. $2(147456)$
    e. 294912

8. Rational

9. Irrational

10. Rational

11. Irrational

12. Irrational

13. Rational

14. Irrational

15. Rational

16. Inverse property

17. Distributive property

18. Associative property

19. Identity property

20. Commutative property