**Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_
Algebra Support Test 1 Number Sense Form A**

**Multiple Choice.**

|  |  |
| --- | --- |
| 1. Which of the following does not show the Commutative Property of Addition?A. ab = ba B. 9 + x = x + 9C. 3x + 4y = 4y + 3x D. a + b = b + a | 1. \_\_\_\_\_\_\_\_\_\_\_
 |
| 2. Which property of Addition does 6 + 0 = 6 illustrate?A. Distributive Property B. Commutative PropertyC. Zero Property D. Identity Property | 1. \_\_\_\_\_\_\_\_\_\_\_
 |
| 3. Which property is used in the following expression? 4(3 + 2) = 12 + 81. Associative Property of Multiplication
2. Distributive Property
3. Associative Property of Addition
4. Commutative Property of Addition
 | 1. \_\_\_\_\_\_\_\_\_\_\_
 |
| 4. Which equation shows the Multiplicative Inverse of a Number? A. a x1 = a  B. a + -a = 0 C. a x (1/a) = 1 D. a x 0 = 0  |  4. \_\_\_\_\_\_\_\_\_\_\_\_ |
| 5. Which property is used in the following expression? (4 + a) + 6 = 6 + (4 + a)1. Associative Property of Addition
2. Commutative Property of Addition
3. Distributive Property
4. Associative Property of Multiplication
 | 1. \_\_\_\_\_\_\_\_\_\_\_
 |
| 6. Simplify this expression: 4( y + z)A. 4yz B. 4z +y C. 4y + 4z D. 4y + z | 1. \_\_\_\_\_\_\_\_\_\_\_
 |
| 7. Find the GCF of 48 and 56.A. 6 B. 8 C. 7 D. 12 | 1. \_\_\_\_\_\_\_\_\_\_
 |
| 8. What is the prime factorization of 40?A.  B.  C.  D.  |  8. \_\_\_\_\_\_\_\_\_\_\_\_ |
| Factor each monomial.9. 18 10.    | 1. \_\_\_\_\_\_\_\_\_\_\_
2. \_\_\_\_\_\_\_\_\_\_\_
 |
| Find the GCF11. 21, 42 12. 40, 60 | 1. \_\_\_\_\_\_\_\_\_\_\_
2. \_\_\_\_\_\_\_\_\_\_\_\_
 |

**Simplify each expression by combining like terms.**

|  |  |
| --- | --- |
| 1. 4p + 8p
 | 13.\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. 11 + 8k + k
 | 14.\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. 3n + 2 + 6n + 7
 | 15.\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. 5r – r
 | 16.\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. 19r + 4 + 8r
 | 17.\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. 5(v+3)
 | 18.\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. -3(3- 8b)
 | 19.\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. –6 + 3(b – 9)
 | 20.\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. -9(3 + 7x)
 | 21.\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. 2(1 + 9b) + 6(1 +2b)
 | 22.\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**Simplify the following Fractions:**

1.  24.  23. \_\_\_\_\_\_\_\_\_\_\_\_\_

24. \_\_\_\_\_\_\_\_\_\_\_\_\_

25. $\frac{6x^{3}}{4x^{4}}$ 26. $\frac{5ab}{10am}$ 25. \_\_\_\_\_\_\_\_\_\_\_\_\_

 26. \_\_\_\_\_\_\_\_\_\_\_\_\_

**Perform the Operation. Circle your answers.**

27. $\frac{1}{3}$ + $\frac{3}{5}$ 27. \_\_\_\_\_\_\_\_\_\_\_\_

 a. $\frac{4}{5}$ b. $\frac{14}{15}$ c. $\frac{1}{5}$ d. $\frac{1}{2}$

28. $\frac{6}{14}$ × $\frac{28}{30}$ 28. \_\_\_\_\_\_\_\_\_\_\_\_

 a. $\frac{168}{420}$ b. $\frac{2}{5}$ c. $\frac{14}{35}$ d. $\frac{7}{15}$

**Perform the Operation. Answers need to be in simplest form.**

29.  30.  31. 

32.  33.  34. $\frac{1}{3}$ + $\frac{2}{6}$

35. Express  as a percent. 35. \_\_\_\_\_\_\_\_\_\_\_

1. 2.5% B. 250% C. 0.4% D. 40%

36. Express 0.305 as a percent. 36. \_\_\_\_\_\_\_\_\_\_\_

1. 0.305% B. 0.00305% C. 30.5% D. 3.05%

37. Express 12% as a fraction in simplest form. 37. \_\_\_\_\_\_\_\_\_\_\_

1.  B.  C.  D. 

38. Express 3.4% as a decimal. 38. \_\_\_\_\_\_\_\_\_\_\_\_

1. 340 B. 0.034 C. 0.34 D. 3.4

39. Express 0.375 as a fraction 39. \_\_\_\_\_\_\_\_\_\_\_\_

40. Express $\frac{4}{5}$ as a decimal 40. \_\_\_\_\_\_\_\_\_\_\_\_\_

**Round these numbers to the nearest hundredth.**

41. 2.3487 41. \_\_\_\_\_\_\_\_\_\_\_

42. 4.799 42. \_\_\_\_\_\_\_\_\_\_\_

**Round these numbers to the nearest thousandth.**

43. 4.58547 43. \_\_\_\_\_\_\_\_\_\_\_

44. 0.64386 44. \_\_\_\_\_\_\_\_\_\_\_

**Use the Order of Operations to solve the following:**

45. -80 ÷ -10 45. \_\_\_\_\_\_\_\_\_\_\_

46. (-1 + 6) – 5 46. \_\_\_\_\_\_\_\_\_\_\_

47. (8 – 5)2 ÷ 3 47. \_\_\_\_\_\_\_\_\_\_\_

48. 4 ÷ 4 – 6 48. \_\_\_\_\_\_\_\_\_\_\_

49. 8 – 6 × 2 + 3 49. \_\_\_\_\_\_\_\_\_\_\_

50. -12 ÷3 + 4 50. \_\_\_\_\_\_\_\_\_\_\_