

Name: _____

Ursuline Academy Freshman Summer Math Packet

You should **show all work** and the entire packet should be done **without a calculator**.

Write the numbers in order from the least to the greatest.

least

greatest

1. 1204, 1702, 1220, 1772, 1358

_____ / _____ / _____ / _____ / _____

2. 23.12, 23.5, 24.0, 23.08, 24.01

_____ / _____ / _____ / _____ / _____

3. 9.027, 9.1, 9.003, 9.3, 9.27,

_____ / _____ / _____ / _____ / _____

4. -3.7, -4.02, -3.93, -4.12, -4.52

_____ / _____ / _____ / _____ / _____

5. $\frac{3}{5}, \frac{3}{4}, \frac{3}{2}, \frac{3}{10}, \frac{3}{7}$

_____ / _____ / _____ / _____ / _____

6. $1\frac{2}{5}, \frac{7}{4}, \frac{5}{3}, 1\frac{1}{8}, \frac{15}{16}$

_____ / _____ / _____ / _____ / _____

7. $\frac{7}{8}, \frac{5}{4}, \frac{3}{4}, 1\frac{1}{3}, \frac{5}{12}$

_____ / _____ / _____ / _____ / _____

List all the factors of each number then write the prime factorization. If it is a prime number, write prime.

All Factors

Prime Factorization

8. 18

9. 10

10. 52

11. 77

12. 100

13. 48

14. 37

15. 210

Find the *Greatest Common Factor, GCF*, and *Least Common Multiple, LCM*, for each set of numbers.

GCF

LCM

15. 14 and 28

16. 9 and 12

17. 3 and 17

18. 3, 6 and 15

19. 15 and 40

20. 12, 20, and 24

21. 5, 8, and 10

22. 45 and 135

Find the sum or difference. Put your answer on the line.

23. $-3 + (-5) =$ _____

24. $6 + (-2) =$ _____

25. $-16 + 7 =$ _____

26. $-2 + 4 + 6 =$ _____

27. $6 + (-10) + 1 =$ _____

8. $-7 + (-4) + 2 =$ _____

29. $-9 + 15 + (-1) =$ _____

30. $8 - (-10) =$ _____

31. $-3 - (-11) =$ _____

32. $-17 - 28 =$ _____

33. $14 - (8) =$ _____

34. $-3 - (-7) =$ _____

Find the product or quotient.

35. $(5)(-8) =$ _____

36. $(-1)(-7)(-3) =$ _____

37. $(-15)(-2) =$ _____

38. $(3)(-10)(2) =$ _____

39. $(-12)(2)(-0.5) =$ _____

40. $(-14)(-3) =$ _____

41. $48 \div (-12) =$ _____

42. $-34 \div 2 =$ _____

43. $-63 \div -9 =$ _____

44. $48 \div -(-3) =$ _____

45. $-(-84) \div 7 =$ _____

46. $-57 \div (-19) =$ _____

Add, subtract, multiply, or divide. Write the answer as a fraction in lowest terms.

$$47. \frac{15}{16} - \frac{1}{8} = \underline{\hspace{2cm}}$$

$$48. \frac{5}{9} \times 1\frac{1}{2} = \underline{\hspace{2cm}}$$

$$49. \frac{12}{13} \div \frac{13}{12} = \underline{\hspace{2cm}}$$

$$50. \frac{24}{25} + \frac{1}{5} = \underline{\hspace{2cm}}$$

$$51. 5\frac{1}{2} - \frac{1}{8} = \underline{\hspace{2cm}}$$

$$52. \frac{7}{8} \times \frac{4}{9} = \underline{\hspace{2cm}}$$

$$53. \frac{1}{3} + \frac{1}{6} = \underline{\hspace{2cm}}$$

$$54. \frac{3}{10} \div \frac{1}{5} = \underline{\hspace{2cm}}$$

$$55. 4\frac{1}{4} \times \frac{2}{3} = \underline{\hspace{2cm}}$$

$$56. 9\frac{2}{5} \times 3\frac{1}{2} = \underline{\hspace{2cm}}$$

$$57. \frac{9}{10} + \frac{3}{8} = \underline{\hspace{2cm}}$$

$$58. 3\frac{5}{6} - 2\frac{1}{3} = \underline{\hspace{2cm}}$$

$$59. 8\frac{1}{2} \times \frac{1}{4} = \underline{\hspace{2cm}}$$

$$60. \frac{11}{15} \times \frac{3}{8} = \underline{\hspace{2cm}}$$

$$61. \frac{4}{7} \div \frac{4}{5} = \underline{\hspace{2cm}}$$

Evaluate the expression.

$$62. 4 + 21 \div 3 - 3^2 = \underline{\hspace{2cm}}$$

$$63. (14 \div 7)^2 + 5 = \underline{\hspace{2cm}}$$

$$64. \frac{6 + 2^2}{17 - 6 \cdot 2} = \underline{\hspace{2cm}}$$

$$65. \frac{(5 - 9)^2}{-3 - 1} = \underline{\hspace{2cm}}$$

$$66. \frac{2^3 - 12}{2(5^2 - 5)} = \underline{\hspace{2cm}}$$

$$67. \frac{(3^2 - 3)}{2 \cdot 9} = \underline{\hspace{2cm}}$$

$$68. \frac{2(17 + 2 \cdot 4)}{6^2 - 11} = \underline{\hspace{2cm}}$$

$$69. \frac{2(5 + 4^2)}{33 - 11} = \underline{\hspace{2cm}}$$

Evaluate the expression for the given value of the variable.

70. $3a^2 + 8$ when $a = -5$ _____

71. $(d^3 - 6) \div 7$ when $d = -3$ _____

72. $1.8x$ when $x = 10$ _____

73. $-|-x| + |-7|$ when $x = 5$ _____

74. $0.05b$ when $b = 9$ _____

75. $d = rt$, when $r = 75$ and $t = 4.5$ _____

76. $|x| - |-2|$ when $x = -5$ _____

77. $\frac{15}{y}$ when $y = 7.5$ _____

Find the answer using percent.

78. 12 is what percent of 60? _____

79. What percent of 68 is 170? _____

80. 6 is what percent of 120? _____

81. What percent of 18 is 4.5? _____

82. What is 38% of 250? _____

83. What is 150% of 90? _____

Solve the equation.

84. $y + 14 = 5$ _____

85. $-7 + x = -3$ _____

86. $n - 11 = -11$ _____

86. $17 - n = 34$ _____

87. $6m = -72$ _____

88. $3x + 1 = 28$ _____

89. $36 = \frac{h}{4}$ _____

90. $-\frac{2}{3}n = -70$ _____

91. $\frac{y}{4} = \frac{5}{3}$ _____

92. $\frac{x}{3} - 1 = 50$ _____

93. $\frac{1}{2}x - 5 = -2$ _____

94. $\frac{4}{5}x - 12 = -32$ _____