

Pre-Ap Algebra Summer Work

(Please complete by the 2nd day of school. This will be the 1st grade in the gradebook. This covers all of the material I already expect you to know, coming into Pre-Ap Algebra 1. If you find that you are struggling with it, you may want to reconsider taking Pre-Ap Algebra 1. I will not spend much time going back over this material at the beginning of the year. Thank you and I look forward to meeting you!)

Basic Fraction Operations (Simplify completely)

1. $\frac{1}{16} + \frac{3}{16}$

2. $\frac{3}{4} + \frac{3}{4}$

3. $\frac{3}{8} - \frac{3}{16}$

4. $\frac{5}{12} + \frac{2}{3}$

5. $2\frac{5}{8} + 4\frac{1}{8}$

6. $1\frac{3}{4} - \frac{11}{16}$

7. $\frac{7}{12} - \frac{1}{16}$

8. $\frac{3}{4} \times \frac{2}{3}$

9. $1\frac{7}{8} \times 2\frac{1}{3}$

10. $\frac{3}{16} \times \frac{2}{5}$

11. $\frac{1}{3} \times 18$

12. $\frac{9}{10} \div \frac{4}{5}$

13. $24 \div \frac{3}{8}$

14. $3\frac{3}{4} \div 6\frac{1}{2}$

Order of Operations

15. $13 - 8 + 3$

16. $8 - 2^2$

17. $3 \cdot 6 - 4$

18. $5 \cdot 2^3 + 7$

19. $48 \div 4^2 + \frac{3}{5}$

20. $1 + 5^2 \div 50$

21. $2^4 \cdot 4 - 2 \div 8$

22. $4^3 \div 8 + 8$

23. $(12 + 72) \div 4$

24. $24 + 4(3 + 1)$

25. $12(6 - 3.5)^2 - 1.5$

26. $24 \div (8 + 4^2)$

27. $\frac{1}{2}(21 + 2^2)$

28. $\frac{1}{6}(6 + 18) - 2^2$

29. $\frac{3}{4}[13 - (2 + 3)]^2$

30. $8[20 - (9 - 5)^2]$

Evaluating Basic Expressions

31. Evaluate $0.4r$ when $r = 6$

32. Evaluate $1.6 - g$ when $g = 1.2$

33. Evaluate $0.8 + h$ when $h = 3.7$

34. Evaluate $\frac{t}{5}$ when $t = 4.5$

35. Evaluate $\frac{1}{2}k$ when $k = \frac{2}{3}$

36. Evaluate $h + \frac{1}{3}$ when $h = 1\frac{1}{3}$

37. Evaluate x^2 when $x = \frac{3}{4}$

38. Evaluate $x + y$
when $x = 11$ and $y = 6.4$

39. Evaluate $w - z$
when $w = 9.5$ and $z = 2.8$

40. Evaluate $\frac{b}{c}$
when $b = 24$ and $c = 2.5$

Basic Exponents

41. Evaluate 1^5	45. Evaluate $(\frac{1}{4})^2$
42. Evaluate 11^3	46. Evaluate $(\frac{3}{5})^3$
43. Evaluate 3^5	47. Evaluate $(\frac{2}{3})^4$
44. Evaluate 2^6	48. Write $(3.2)^2$ in words

Translating Phrases

49. 8 more than a number x	54. Number of tokens needed for v video games if each game takes 4 tokens
50. $\frac{1}{2}$ of a number m	55. Each person's share if p people share 16 slices of pizza equally
51. The difference of 7 and a number n	56. Number of days left in the week if d days have passed so far
52. The quotient of twice a number t and 12	57. Number of months in y years
53. 7 less than twice a number k	

Basic Operations of Positives & Negatives

58. $-11 + 3$	66. $5(-7.2)$
59. $-9 + (-4)$	67. $-8(-11)$
60. $9.1 + (-2.5)$	68. $-\frac{5}{6}(-12)(-4)$
61. $-2.6 + (-3.4) + 7.6$	69. $-21 \div 3$
62. $13 - (-5)$	70. $-18 \div -6$
63. $16 - 32$	71. $15 \div (-\frac{3}{4})$
64. $-15 - 29$	72. $-\frac{1}{2} \div \frac{1}{5}$
65. $-18.2 - (-15.4)$	

Solving One-Step Equations

73. $6 = 9 + h$

74. $y - 4 = 3$

75. $14 = k - 3$

76. $-2 = n - 6$

77. $5g = 20$

78. $-108 = 9j$

79. $\frac{y}{3} = 5$

80. $7 = \frac{t}{-7}$

81. $b - 0.4 = 3.1$

82. $-5.7 = w - 4.6$

83. $8.2 = -4x$

84. $\frac{3}{4} = \frac{1}{8} + v$

85. $\frac{n}{4.6} = -2.5$

86. $\frac{1}{2}m = 21$

Solving Two-Step Equations

87. $3x + 7 = 19$

88. $2g - 13 = 3$

89. $\frac{a}{3} + 4 = 6$

90. $-6 = \frac{x}{4} - 3$

91. $5h + 4 = 19$

92. $10 = 7 - m$

93. $17 = \frac{w}{5} + 13$

94. $7 = \frac{5}{6}c - 8$

95. $7d - 1 = 13$

96. $11 = 12 - q$

97. $\frac{b}{2} - 9 = 11$

98. $10 = \frac{2}{7}n + 4$

99. $8y + 3y = 44$

100. $-32 = -5k + 13k$