

Algebra 1 and Algebra 1B  
Summer Math Packet, 2019  
Ms. Thompson

Welcome to Algebra 1 and Algebra 1B,

This packet is designed to help you prepare for what you will be learning in the upcoming school year. While you can complete this packet at any time during the summer, it will be wise if you spend the two to three weeks leading up to the new school year to review this packet.

In addition to completing this packet, you will need the following before the start of the school year:

- A TI-34 Multi-view calculator. You may email me a picture of the calculator before you purchase it, at [cthompson@latinpcs.org](mailto:cthompson@latinpcs.org).
- A three ring binder, a divider to separate your homework and notes, and plenty of lined and graph paper.

See you in August!

Ms. Thompson

## Summer Math Packet

Date \_\_\_\_\_

**Evaluate each expression using Order of Operations (PEMDAS).**

1)  $(3 \times 2) \div 2$

2)  $12 \div (5 - 2)$

3)  $(2) \left( \frac{3 + 17}{4} \right)$

4)  $2 + 2 - (5 - 2)$

5)  $(5) \left( \frac{12 - 2}{2} \right)$

6)  $(5 + 5)(6 - 3)$

7)  $\frac{12 \cdot 2 - 6}{6} + 3$

8)  $\frac{12}{5 - (4 + 3 - 4)}$

**Evaluate each using the values given.**

9)  $k + 6 - h$ ; use  $h = 3$ , and  $k = 4$

10)  $3 + zx$ ; use  $x = 2$ , and  $z = 6$

11)  $a + c - b$ ; use  $a = 4$ ,  $b = 6$ , and  $c = 4$

12)  $rp - p$ ; use  $p = 2$ , and  $r = 5$

13)  $y + 6 - (x - x^2)$ ; use  $x = 1$ , and  $y = 1$

14)  $3 + x^3 - x - z$ ; use  $x = 2$ , and  $z = 1$

15)  $n + n \div 3 + m^2$ ; use  $m = 3$ , and  $n = 3$

16)  $y - 3 + 5x + y$ ; use  $x = 6$ , and  $y = 4$

**Evaluate each expression.**

17)  $4 - 2$

18)  $1 + (-4)$

19)  $(-2) + (-1)$

20)  $3 + 4$

21)  $(-5) + 2$

22)  $(-1) - 1$

23)  $6 - (-1)$

24)  $5 + 2$

25)  $4 + 5 - 2$

26)  $\frac{3 \times 2}{2}$

27)  $6 - (6 - 6)$

28)  $\frac{6}{1 + 5}$

29)  $\frac{5 \times 5}{5}$

30)  $\frac{4}{4 - 2}$

31)  $3 + 6 - 4$

32)  $5 - (2 + 2)$

**Write each fraction in its complete, reduced form. Do not worry about converting fractions from improper fractions to mixed numbers. We will rarely use mixed numbers in Algebra.**

33)  $\frac{2}{6}$

34)  $\frac{20}{30}$

35)  $\frac{57}{12}$

36)  $\frac{17}{85}$

37)  $\frac{21}{56}$

38)  $\frac{200}{150}$

39)  $\frac{54}{72}$

40)  $\frac{200}{32}$

**Adding and Subtracting Fractions and Whole Numbers**

41)  $\frac{4}{7} + \frac{2}{7}$

42)  $\frac{3}{2} + \frac{5}{8}$

43)  $3 + \frac{2}{9}$

44)  $\frac{2}{5} + \frac{1}{5}$

45)  $\frac{3}{4} - \frac{1}{2}$

46)  $\frac{3}{5} - \frac{1}{10}$

47)  $\frac{2}{3} + 6$

48)  $8 - \frac{3}{5}$

**Multiplying and Dividing Fractions and Whole Numbers. Reduce your result to its simplest form (as an improper fraction).**

49)  $\frac{3}{7} \cdot \frac{7}{3}$

50)  $5 \cdot \frac{2}{3}$

$$51) -12 \cdot \frac{1}{4}$$

$$52) -3 \cdot -\frac{1}{6}$$

$$53) -\frac{1}{9} \cdot -\frac{1}{6}$$

$$54) -\frac{2}{11} \cdot \frac{3}{6}$$

$$55) -\frac{2}{7} \cdot -3$$

$$56) -\frac{5}{8} \cdot \frac{2}{5}$$

$$57) 9 \cdot \frac{5}{12}$$

$$58) -6 \cdot \frac{2}{7}$$

$$59) \frac{3}{4} \div \frac{1}{2}$$

$$60) \frac{5}{6} \div \frac{2}{3}$$

$$61) 4 \div \frac{5}{6}$$

$$62) \frac{1}{6} \div 6$$

$$63) 20 \div \frac{9}{10}$$

$$64) \frac{1}{2} \div \frac{4}{15}$$

65)  $\frac{1}{5} \div \frac{1}{8}$

66)  $\frac{6}{7} \div 8$

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

67)  $-6n + 4 + 10n$

68)  $7 + m - 3 - 3m$

69)  $-3r + 7r$

70)  $5x + 4 - 3x - 7$

71)  $10n - 4n$

72)  $1 + 7b - 6$

73)  $3n - 4 + 4$

74)  $7x - 6 - 10$

75)  $2b + 8b$

76)  $-6n - 7n$

**Simplify each expression by using the Distributive Property.**

77)  $-9(r + 4)$

78)  $-10(-7x + 7)$

79)  $7(2 - 3x)$

80)  $-(7 - 2x)$

81)  $-6(9 - 10v)$

82)  $-9(p + 3)$

**Simplify each expression.**

83)  $10 - 7(2x - 10)$

84)  $-6k - 9(k + 7)$

85)  $-4b - 8(1 + b)$

**Write each as an algebraic expression.**

86) n cubed

87) 11 more than 11

88) the quotient of 8 and w

89) the product of 5 and x

90) 8 more than 4