

Dear Algebra 1 Student,

This is your first assignment for Algebra 1. **Please complete these problems and bring them with you on the first day of school.** The work can be done on the worksheet, but it should be done neatly. You may use notebook paper if you wish. Copy the problem and then show all work. Any computation can be done out to the side of the problem. **YOU MAY NOT USE A CALCULATOR.** All answers should be written in the answer blanks.

I look forward to meeting you!!!

Mrs. Denny

Name: \_\_\_\_\_

Period: \_\_\_\_\_

## SUMMER PREPARATION – ALGEBRA I

A. Find the answer to each. Be sure and use PEMDAS. Reduce if necessary.  
Must show work!!

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

2.  $\frac{1}{3} - \frac{1}{4} + \frac{1}{5}$

3.  $\frac{-4}{15} \cdot \frac{5}{6}$

Ans: \_\_\_\_\_

Ans: \_\_\_\_\_

Ans: \_\_\_\_\_

4.  $\frac{9}{8} \div \frac{243}{72}$

5.  $-3.06 - 5.8$

6.  $0.12 - 5.04$

Ans: \_\_\_\_\_

Ans: \_\_\_\_\_

Ans: \_\_\_\_\_

7.  $(-2.33)(-0.005)$

8.  $2\frac{1}{6} + \frac{9}{24} - \frac{2}{3}$

9.  $\frac{1}{3} \div \frac{14}{15}$

Ans: \_\_\_\_\_

Ans: \_\_\_\_\_

Ans: \_\_\_\_\_

10.  $24 \div 0.004$

11.  $1.24 - 6$

12.  $2 \div \frac{1}{6}$

Ans: \_\_\_\_\_

Ans: \_\_\_\_\_

Ans: \_\_\_\_\_

13.  $(-4)^2$

Ans: \_\_\_\_\_

14.  $2^3$

Ans: \_\_\_\_\_

15.  $(\frac{2}{3})^2$

Ans: \_\_\_\_\_

16.  $2[5 + (-13)]$

Ans: \_\_\_\_\_

17.  $2(3^2 + 4 \div 2)$

Ans: \_\_\_\_\_

18.  $\frac{4 \div 2 + 10}{6}$

Ans: \_\_\_\_\_

19.  $-(3 - 6 + 2 + 4)$

Ans: \_\_\_\_\_

20.  $15 \div 3 \cdot \frac{1}{5}$

Ans: \_\_\_\_\_

21.  $(-3)(6) + (-2)(4)$

Ans: \_\_\_\_\_

22.  $2^3 + 3^2$

Ans: \_\_\_\_\_

23.  $\frac{27}{9} + \frac{40}{8} - \frac{72}{6}$

Ans: \_\_\_\_\_

24.  $-[2(8 - 9)]$

Ans: \_\_\_\_\_

**B. Substitute and evaluate the following expressions if  $a = \frac{1}{3}$ ,  $b = 12$ ,  $c = 0$ ,  $d = -3$ ,  $e = \frac{1}{6}$ .**

**Must show work!!**

25.  $ab$

26.  $be + ad$

27.  $abe$

Ans: \_\_\_\_\_

Ans: \_\_\_\_\_

Ans: \_\_\_\_\_

28.  $a + e$

29.  $abcd$

30.  $b \div c$

Ans: \_\_\_\_\_

Ans: \_\_\_\_\_

Ans: \_\_\_\_\_

31.  $-db$

32.  $c \div d$

33.  $ab \div e$

Ans: \_\_\_\_\_

Ans: \_\_\_\_\_

Ans: \_\_\_\_\_

34.  $b \div d \div e$

Ans: \_\_\_\_\_

**C. Combine like terms.**

35.  $2d^2 + 3d^2 - 4e^2 - 5e^2$

36.  $\frac{1}{7}x - \frac{1}{3}y + \frac{3}{14}x + \frac{5}{6}y$

Ans: \_\_\_\_\_

Ans: \_\_\_\_\_

37.  $4a^2 - 5a + 6a + 10$

38.  $0.33rt - 0.46r^2t - rt - r^2t$  39.  $-3t - 2t - 5t - 6t$

Ans: \_\_\_\_\_

Ans: \_\_\_\_\_

Ans: \_\_\_\_\_

**D. Solve and check. Must show work!!**

40.  $x - 4 = 10$

41.  $3 + y = 16$

42.  $\frac{4}{5}x = 10$

Ans: \_\_\_\_\_

Ans: \_\_\_\_\_

Ans: \_\_\_\_\_

43.  $-3c = -17$

44.  $3x - 5 = 15$

45.  $24 - 7r = 21$

Ans: \_\_\_\_\_

Ans: \_\_\_\_\_

Ans: \_\_\_\_\_

46.  $\frac{1}{3}g + \frac{2}{3} = \frac{1}{6}$

47.  $0.02w + 0.75 = -0.25$

48.  $\frac{1}{12}p - \frac{5}{6} = 1$

Ans: \_\_\_\_\_

Ans: \_\_\_\_\_

Ans: \_\_\_\_\_

49.  $-5y - 3 = -2$

50.  $16 + 2d = -14$

Ans: \_\_\_\_\_

Ans: \_\_\_\_\_