

## Summer Packet for 8<sup>th</sup> Grade Pre-Algebra Students

This assignment is intended to review 7<sup>th</sup> grade Math skills that will be needed in Pre-Algebra. It is not a comprehensive review; rather, it covers the sections that we feel students forget over the summer. You are expected to know the content in this assignment. During the first week of school, your teacher will inform you how this packet will be used as a first quarter assignment.

---

### **Solve. Show work.**

1.  $-20 + (-12) + (-8)$

2.  $-32 - 40 + 11$

3.  $15 + (-8 - 2)$

4.  $21 - (-13) + (-7)$

5.  $-12 - (-25) + 13$

6.  $-5(6 + 4)$

7.  $-9(10 - 7)$

8.  $3 \cdot 9 + 12 \div (-6)$

9.  $15 - 6 \div 3 + 4$

10.  $(25 - 3) \div (5 + 6)$

11.  $9 + 3^3 \div 9$

12.  $-4^2 \div 8 - (-3)$

13.  $8 \cdot (-10) - 2^5 \div 16$

14.  $3\{2 + (4 + 6)\}$

15.  $\frac{4 \cdot 5 + 2}{15 - 6 + 2}$

16.  $12 - 5 \cdot 12 \div 10 + 2$

**Solve. Simplify fractions. Show work.**

17.  $7\frac{1}{10} - 5\frac{2}{5}$

18.  $3\frac{3}{4} + 6\frac{3}{8}$

19.  $7\frac{3}{4} - \left(-1\frac{1}{8}\right)$

20.  $-4\frac{1}{7} + \left(-2\frac{5}{8}\right)$

$$21. \quad -4\frac{2}{3} + 6\frac{1}{2}$$

$$22. \quad -\frac{3}{8} - \frac{1}{2} + \frac{5}{6}$$

$$23. \quad -\frac{2}{3} \bullet \frac{5}{8}$$

$$24. \quad 3\frac{3}{4} \bullet -1\frac{3}{5}$$

$$25. \quad \frac{5}{6} \div \frac{1}{5}$$

$$26. \quad 1\frac{3}{10} \div 1\frac{4}{5}$$

**Solve. Show work.**

$$27. \quad 2.23 - 4.56 + (-1.453)$$

$$28. \quad -3.601 - (-8.2) + 3.2$$

**Solve the equation. Show work.**

29.  $x - 6 = -13$

30.  $-3 = x - 8$

31.  $-10.1 = x + 5.3$

32.  $\frac{1}{2} = x + \frac{2}{3}$

33.  $-5x = -45$

34.  $\frac{x}{-3} = 9$

35.  $-\frac{8}{5}x = 26$

36.  $-12 = \frac{3}{4}x$

37.  $2x + 7 = 3$

38.  $17 = 2 - 5x$

$$39. \quad -\frac{2}{3}x + \frac{3}{7} = \frac{1}{2}$$

$$40. \quad -\frac{1}{3} + 2x = -\frac{5}{6}$$

$$41. \quad 3(x - 6) = 21$$

$$42. \quad \frac{2}{5}(10x + 15) = 18$$

**Solve and graph the inequality on a number line.**

$$43. \quad 3x + 2 < 11$$

$$44. \quad -2x + 4 \geq 18$$



**Simplify.**

$$45. \quad x + 8 + 3x$$

$$46. \quad 3x + 4 - 4x + 2$$

$$47. \quad 4(x - 6) + 19$$

$$48. \quad 4x - 5(x + 6)$$

49.  $\frac{2}{3}(12x - 9) + 14x$

50.  $3(2x - 5) + 4(-2x + 3)$

51.  $(3x - 8) + (7x - 2)$

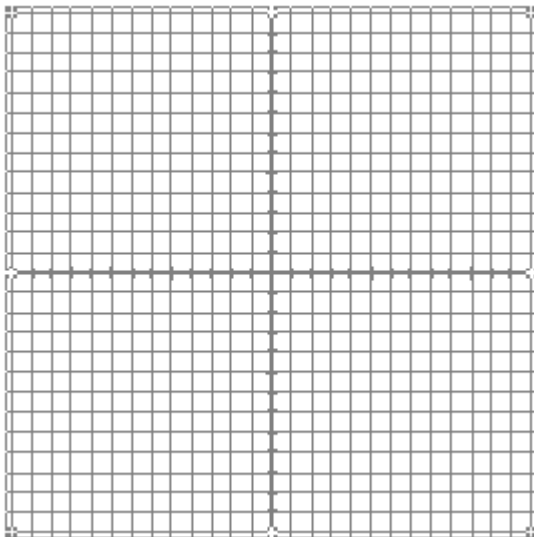
52.  $(9x + 2) - (3x + 5)$

53.  $(-10x + 2) - (-7x - 4)$

54.  $\frac{1}{2}x - 4 + \frac{3}{4}x + \frac{1}{8}$

**Graph the following points on a coordinate plane and connect them.**

55.  $(0, 3), (-1, 1), (1, 5)$



56.  $(-4, 1), (4, -5), (0, -1)$

