Algebra 1/Honors Algebra 1
Summer Work 2026

All problems should be completed without a calculator, and work should be shown when there is more than one step.

Section 1: Inequalities - Fill in the blanks using =, >, or < to compare.

1. 0 _____ 3
2. -4 _____ -5
3. $\frac{10}{5}$ _____ 2
4. $-\frac{1}{3}$ _____ $-0.\overline{3}$
5. -11.99_____-11.98
6. $\frac{25}{2}$ _____ 12.5

Section 2: Simplification - Write the following fractions in their simplest form.

7. $\frac{4}{12}$
8. $\frac{3}{27}$
9. $\frac{6}{24}$
10. $\frac{11}{55}$
11. $\frac{8}{20}$
12. $\frac{7}{14}$

Section 3: Operations with Fractions - Simplify Each of the following expressions

13. $\frac{1}{3}+\frac{2}{3}$
14. $\frac{1}{7}+\frac{3}{7}$
15. $\left(\frac{2}{5}\right)^2$
16. $\frac{2}{5}\times\frac{3}{4}$
17. $\frac{4}{5}\div\frac{9}{10}$
18. $\frac{3(6+2)}{3+1}$

Section 4: Sums, Differences, Products, and Quotients - Find the solution for each statement

19. -3 - 6

20. -10 + 9

21. -8 - (-10)

22. -4 - (-2)

23. -11 - 13 - 1 + 12

24. -18 - (-45) + 46

25. -3 * -4

26. 20 * -2

27. (-9)(-3)

28. $12 \div -2$

29. $-12 \div -3$

30. $4 \times 3^2 + 2$

31. $4 + 8 + 2\,(5)$

32. $7 + 3(-2 + 4)^2$

Section 5: Terms to percentages - Write each of the following terms as a percent

33. 0.25

34. $\frac{4}{5}$

35. $\frac{2}{3}$

36. 0.478

37. 1.08

38. $\frac{17}{100}$

Section 6: Percentages to numbers - Write each of the following percentages as a number

39. 90%

40. 9%

41. 115%

42. 0.3%

43. 45.6%

44. 444%

Section 7: Plotting Points - Plot the following pomints on the graph provided

45. A(1,1)

46. B(-2,5)

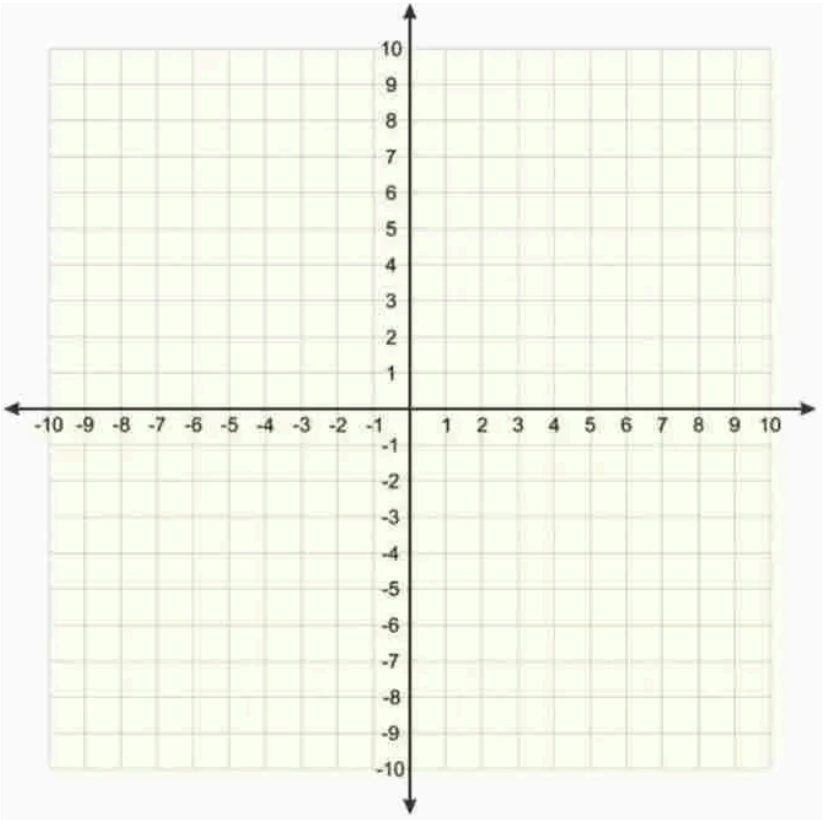
47. C(-3,-3)

48. D(-5,6)

49. E(0,8)

50. F(0,-3)

51. G(5, 5.5)



Section 8: Evaluating Values - Evaluate each of the following expressions for x = 2 and y = -1

52. x - y

53. x * y

54. y * x

55. $\frac{x}{y}$

56. $\frac{y}{x}$

57. xy

Show your work on this sheet of paper