

Algebra 1

Please complete all work on a separate sheet of paper.
Complete ALL problems **WITHOUT** the use of a calculator.

Show all steps used to arrive at your final answer. Identify your final answer by placing a box or circle around it.

Order of Operations – Remember to show your work.

1. $17 - 6 \cdot 10 \div 2 + 12$

2. $5 \times (8 + 7) + 7$

3. $[2 \cdot (10 + 5)] - 5$

Adding Integers

4. $-10 + 1 + (-6)$

5. $172 + (-167) + (-10) + (-144)$

6. $-13 + 4 + (-2) + 10$

Subtracting Integers

7. $6 - (-9)$

8. $10 - 19$

9. $-5 - 3$

Multiplying and Dividing Integers –

10. State the rules.

Positive * Positive =

Positive * Negative =

Negative * Positive =

Negative * Negative =

11. $4(-7)$

12. $-4 \cdot 10 \cdot 6$

13. $-88 \div 11$

14. $-95 \div -5$

Adding and Subtracting Fractions – Remember to show your work.

15. $\frac{4}{12} + \frac{9}{12}$

16. $\frac{5}{12} - \frac{12}{6}$

17. $\frac{2}{3} + \frac{1}{11}$

18. $-\frac{17}{9} - \frac{14}{8}$

19. $13\frac{1}{3} - 7\frac{7}{9}$

20. A garden is $14\frac{1}{2}$ feet by $13\frac{1}{4}$ feet. What is the perimeter of the garden?

Multiplying Fractions - Remember to show your work.

21. $\frac{-4}{7} \cdot \frac{-3}{4}$

22. $\frac{12}{13} \cdot \frac{11}{24}$

23. $-1\frac{3}{7} \cdot 3\frac{2}{3}$

24. A garden is $14\frac{1}{2}$ feet by $13\frac{1}{4}$ feet. What is the area of the garden?

Dividing Fractions - Remember to show your work.

25. $\frac{2}{9} \div \frac{-3}{27}$

26. $\frac{8}{7} \div \frac{4}{7}$

27. $2\frac{2}{3} \div 1\frac{1}{11}$

Solving one and two step equations - Remember to show your work.

28. $-3x = 15$

29. $10 - x = 25$

30. $3x + 8 = 29$

31. $-15 = 20 + 5x$

Percents – Write the following as a percent. Remember to show any work leading up to your final answer.

32. $\frac{2}{5}$

33. 0.7

34. 1.5

35. $\frac{3}{8}$

36. 0.525

37. 0.05

Complete the chart. Each row should show the same value in a different representation.

	Fraction (that isn't simplified)	Simplified Fractions	Percent	Decimal
38.	$\frac{4}{10}$			
39.			15%	
40.				0.3
41.		$\frac{3}{7}$		

Find the percent of change.

42. 10 to 20

43. 10 to 15

44. 20 to 60

45. 5 to 6

46. 100 to 50

Greatest Common Factor (GCF) and Least Common Multiple (LCM) – Find the GCF and the LCM of the following numbers.

47. 10 and 15

48. 20 and 30

49. 5 and 8

50. 12 and 20