

Sterling Classical School

■ Summer Math Adventure!

Rising to Pre-Algebra

Helping you get ready for The School of Logic Math!

Name: _____

Date: _____

Directions: Solve each problem neatly on notebook paper. Show your work and write your answers clearly.

Number Sense & Operations

1. Write 4,305,678 in expanded form.

2. Value of the 3 in 5.347

3. 0.65 ___ 0.605

4. Round 7.486 to nearest tenth

5. Order: $\frac{3}{5}$, 0.6, $\frac{2}{3}$

6. 0.125 as a fraction

7. $\frac{3}{8}$ as decimal

8. 25% of 200

9. $4.75 + 2.6$

10. $9.4 - 3.87$

Fractions & Decimals

11. $\frac{3}{4} + \frac{1}{8}$

12. $\frac{5}{6} - \frac{1}{3}$

13. $\frac{2}{3} \times 9$

14. $\frac{4}{5} \times \frac{3}{7}$

15. $12 \div \frac{3}{4}$

16. $5 \div \frac{2}{3}$

17. $2.45 + 6.78$

18. 3.6×4

19. 0.8×0.5

20. $6.3 \div 3$

Ratios, Rates & Percents

21. Ratio 12 boys to 8 girls (simplest form)

22. Equivalent ratio to 3:5

23. 120 miles in 3 hours \rightarrow unit rate

24. 15 out of 60 as percent

25. \$50 with 20% off

26. 30% of 90

27. 0.35 as percent

28. 2 cups for 4 servings \rightarrow 8 servings

29. 5 notebooks cost \$10 \rightarrow unit cost

30. 18 out of 20 as percent

Expressions & Equations

31. Expression: 5 more than n

32. $4 + 3 \times 6$

33. $(8 + 2) \times 5$

34. $x + 7 = 15$

35. $5x = 35$

36. $x \div 4 = 6$

37. Expression: twice a number minus 3

38. $18 \div 3 + 4 \times 2$

39. $x - 9 = 21$

40. $n=4 \rightarrow 3n + 5$

Geometry & Measurement

41. Area of rectangle (10×6)

42. Perimeter of same rectangle

43. Triangle area (base 8, height 5)

44. Volume ($4 \times 3 \times 5$)

45. 2.5 meters to cm

46. 3 hours to minutes

47. Type of angle 135°

48. Degrees in triangle

49. Area of square (side 7)

50. Area 72, width 8 \rightarrow length