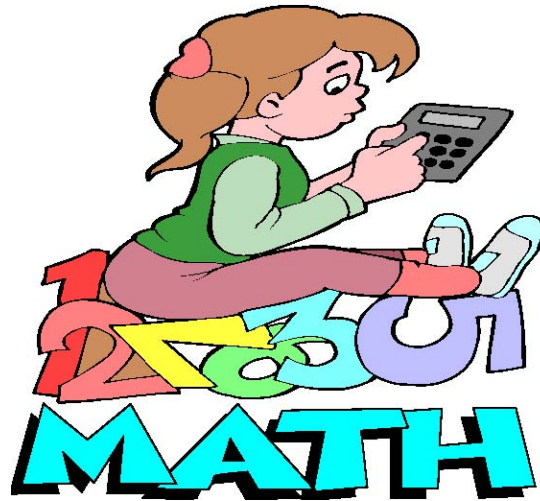


Rising 8th Grade Summer Math Work



Congratulations!
We can't wait to meet you!

Your future math teachers would like for you to complete the attached set of math problems. Our intention with "Summer Math" is to keep you thinking and solving math problems.

The math work is due during the first week of school. Please show your work as no credit will be given to students who have not chosen to show their work.

Solve each of the following.

1. $\frac{7}{8} = \frac{14}{n}$

2. $\frac{5}{24} = \frac{10}{n}$

3. $\frac{17}{51} = \frac{1}{n}$

4. $\frac{35}{40} = \frac{7}{n}$

5. $\frac{10}{6} = \frac{5}{n}$

Change each of the following to a fraction or a mixed numeral in simplest form.

6. 25% = _____

7. 5% = _____

8. $12\frac{1}{2}\%$ = _____

9. 190% = _____

10. 56% = _____

Change each decimal to a percent.

11. $0.7 =$ _____

12. $0.003 =$ _____

13. $1.06 =$ _____

14. $2.001 =$ _____

15. $1.296 =$ _____

Complete the following table.

Percent	Fraction	Decimal
9%		
	$47/100$	
		0.79
153%		
	$1/3$	

Evaluate each expression when $x=2$.

26. x^5

27. $(6x)^2$

28. x^1

29. $2x^3$

30. $(8x)^3$

Use the order of operations to find each answer.

31. $(4^2 + 8) + 2$

32. $(4 + 2) \cdot 3 - (6^2 \div 2)$

33. $17 - 4(12 - 2 \cdot 6) + 3$

34. $15 + 3 \cdot 2 - (27 \div 3^3)$

35. $6 + 4(4 + 2) - 12 \div 4$

Solve.

36. $3 - 7 + 9$

37. $-4 + 11 + 2$

38. $5 - 4 - 2$

39. $8 - 27 - 12$

40. $2 - 13 + 11$

41. $-12 - 5$

42. $-15 - 15$

43. $-11 - (-4)$

44. $-18 - (-30)$

45. $-2 - (2)$

Solve and check each solution.

46. $5n - 30 = -20$
47. $40 = 13q - 12$
48. $8t - 3 = 21$
49. $2f - 7 = -9$
50. $-7b + 10 = -11$

Find the percent of one number is of another.

51. What percent of 56 is 49?
52. 7 is what percent of 20?
53. 48 is what percent of 300?
54. What percent of 9 is 4.5?
55. What percent of 18 is 27?

Problem Solving

56. Riley is playing a grid-game on which he can move his game piece either one or three squares forward, one or three squares to the left, or one or three squares to the right. How many ways can Riley move his game piece?
57. A film developer charges \$1.00 for each roll of film developed plus \$0.04 for each picture developed. What is the cost for developing a roll with 12 pictures?
58. Anna wants to hang new drapes in her room. One window is 3 feet 3 inches wide, and the other window is 5 feet 9 inches wide. How many feet of fabric should Anna buy? Anna has selected a fabric with the same length as the windows.
59. Robert has an 88% average on his math tests. He has had four tests, but can only remember what he scored on three of them. Robert knows he scored a 95%, 77%, and 82%. What score did he get on the fourth test?
60. Brian has three solid objects: a cube, a sphere, and a cylinder. The solids are red, green, and blue, although not necessarily in that order. The blue solid is not the cube. The green solid has no edges. What color is each solid object?