Summer Math

For students entering Mathematics 6

Name _____ Period _____

Show all work steps neatly in the space provided.

Re-write each problem vertically and solve. Remember to line up all place values appropriately. Show regrouping steps clearly.

1. 7.906 + 1.72 =

2. 102 + 17.08

3. 10.056 – 6.83 =

4. 237.05 – 75.008 =

5. 400 – 12.87 =

Rewrite each problem vertically and solve. Be sure to rewrite your new/resulting division problem after moving decimal points.

6. 4.23 x 5.8 =

7. 31.02 x 4.91 =

8. 5.096 x 4.03

9. 59.7 ÷ 0.4 =

10. 95 ÷ 0.05 =

11. 97.2 ÷ 0.72

Round each decimal to the nearest hundredth.

12. 3.509 _____

13. 76.1954 _____

14. 0.764 _____

Round each decimal to the nearest tenth.

15. 51.686 _____

16. 9.03 _____

17. 4.257 _____

18. 28.73 _____

Round each decimal to the nearest whole number.

19. 54.19 _____

20. 31.79 _____

21. 9.6 _____

Order the numbers from least to greatest.

22. 246.8, 248.6, 244.9, 246.5 _____

23. 246.8, 246.809, 246.81, 246.9 _____

24. 129, 198, 200, 141 _____

Find the Greatest Common Factor (GCF) of the following numbers.

25. (18, 24) GCF = _____

26. (15, 6) GCF = _____

27. (16, 32) GCF = _____

28. (12, 48) GCF = _____

29. (7, 7) GCF = _____

Find the Least Common Multiple (LCM) of the following numbers.

30. (9, 15) LCM = _____

31. (4,8) LCM = _____

32. (12, 20) LCM = _____

33. (6, 8) LCM = _____

34. (18, 27) LCM = _____

Simplify the following fractions. Identify the GCF used.

35. $\frac{6}{8}$ = GCF = _____

36. $\frac{12}{18}$ = GCF = _____

37. $\frac{30}{55}$ = GCF = _____

38. $\frac{14}{24}$ = GCF = _____

39. $\frac{11}{44}$ = GCF = _____

40. $\frac{25}{35}$ = GCF = _____

Convert each fraction or mixed number to a decimal. Convert each decimal to a fraction or mixed number **in simplest form.** Show any work done in conversions.

41. $\frac{1}{2} =$

42. $5\frac{3}{4} =$

43. $4\frac{1}{8} =$

44. $\frac{7}{20} =$

45. $\frac{9}{72}$

46. 0.65 =

47. 0.05 =

48. 4.5 =

49. 7.25 =

50. 3.012 =

Add or subtract. Regroup when needed by borrowing or carrying over. (*Do not change your mixed numbers to improper fractions to solve*.) You may rewrite the problems vertically to solve.

51. $\frac{4}{7} + \frac{9}{28} =$

52. $\frac{2}{3} - \frac{1}{4} =$

53. $4\frac{5}{8} - \frac{1}{8} =$

54. $8\frac{2}{5} - 6\frac{5}{10} =$

55. $9\frac{4}{5} + 8\frac{1}{2} =$

56. $3\frac{1}{4} - 2\frac{1}{3} =$

57. $4\frac{4}{15} + 3\frac{9}{10} =$

58. $4\frac{3}{10} + 7\frac{5}{6} =$

59. $6\frac{11}{15} - 1\frac{9}{10} =$

60. $3\frac{4}{9} - 2\frac{8}{9} =$

Multiply or Divide. Show **cross-simplifying** wherever possible. Remember to KEEP, CHANGE, FLIP, to solve division with fractions. Write all answers in **simplest form**.

61. $\frac{1}{3} \cdot \frac{3}{5} =$

62. $\frac{3}{8} \cdot \frac{2}{9} =$

63. $2 \cdot \frac{5}{8} =$

64. $3 \cdot 1\frac{5}{6} =$

65. $2\frac{1}{2} \cdot 2\frac{2}{13} =$

66. $\frac{1}{4} \div \frac{1}{2} =$

67. $2\frac{1}{3} \div 1\frac{3}{4} =$

68. $\frac{3}{7} \div 3\frac{3}{5} =$

69. $\frac{9}{10} \div \frac{3}{5} =$

70. $3\frac{1}{4} \div 2\frac{5}{6} =$

Solve the following using order of operations. (PE MD AS) Be sure to show work steps.

71. 15 + 5 x 3 =

72. 3 + 18 ÷ 3 – 4 =

73. $8 - 14 \div (9 - 2) =$

74. $4 - 24 \div 2^3 =$

75. $2 \cdot (7 + 5) \div 4 =$

76. $58 + 2 \cdot 5 - 12 \div 4 =$

77. $8 \times (13 \times 10 + 3^2) - 7 =$

78. $(11 + 55 - 6^2) \div (20 - 5) =$

79. $10 \times (12 \times 7 - 2^2) + 5 =$

80. $(8 + 29 - 5) \div 8 + 2^2 =$

Solve for the variable in each equation. Show any computations done when solving.

81. $17 + x = 29$

82. $r - 68 = 23$

83. $15 \cdot z = 0$

84. $y \cdot 7 = 91$

85. $\frac{k}{9} = 16$

86. Are the ratios $\frac{45}{3}$ and $\frac{9}{5}$ equivalent?

87. Are the ratios $\frac{5}{7}$ and $\frac{15}{21}$ equivalent?

Solve for the variable.

88. $\frac{2}{n} = \frac{3}{24}$

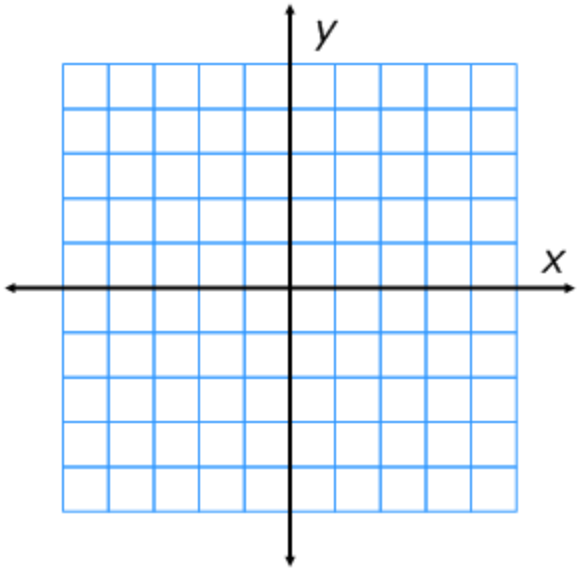
89. $\frac{2}{3} = \frac{18}{n}$

90. $\frac{n}{9} = \frac{12}{27}$

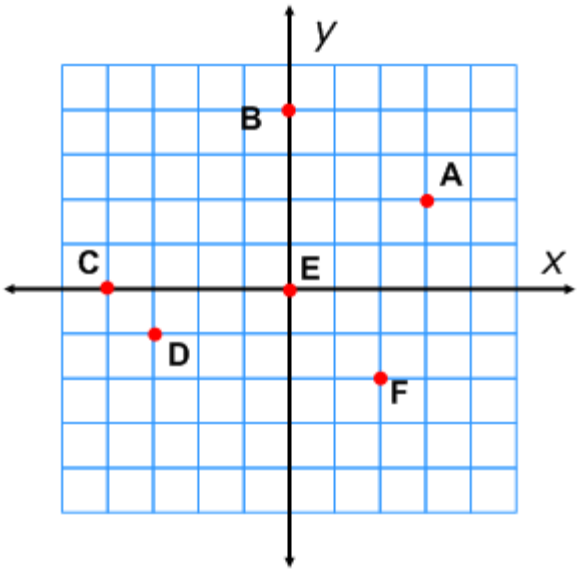
91. $\frac{7}{3} = \frac{n}{12}$

92. Graph each point:

A(2,0), B(-3,-4), C(2,-5), D(-1,4), E(1,2), F(0,-3)



93. Write the coordinates of the points:



A: _____

B: _____

C: _____

D: _____

E: _____

F:_____

The End

See you in 6th grade!