Name _____ Date _____

6ᵗʰ to 7ᵗʰ Grade Summer Math Enrichment- 2024
(Please show all work and answers on a separate piece of paper)

This will count as a homework grade and a quiz will be given on the content the first week of school.

In 1-8, divide. Round to the nearest hundredth, if necessary.

1. $837 \div 27$

2. $588 \div 84$

3. $7440 \div 124$

4. $6409 \div 61$

5. $8241 \div 173$

6. $33,505 \div 160$

7. $5424 \div 52$

8. $74386 \div 874$

In 9-16, add or subtract.

9. $7.82 + 3.209$

10. $3.7 + 2.774$

11. $12.829 + 10.07$

12. $20.35 + 13.748$

13. $4.58 - 3.12$

14. $8.629 - 5.309$

15. $25.82 - 22.936$

16. $13 - 10.856$

In 17-21, divide.

17. $4.5 \div 0.9$

18. $34.1 \div 5.5$

19. $49.707 \div 6.3$

20. $205.605 \div 13.5$

21. $0.3 \div .12$

In 22-26, multiply.

22. 2.7×7.8

23. 3.23×1.6

24. 0.77×0.689

25. 8.25×5.7

26. 3.33×0.974

In 27-31, multiply. Reduce all answers to lowest terms.

27. $\frac{6}{7} \cdot \frac{5}{9}$

28. $\frac{3}{8} \cdot \frac{4}{9}$

29. $3\frac{1}{7} \times \frac{14}{15}$

30. $5 \times \frac{12}{15}$

31. $4\frac{2}{3} \times 3\frac{7}{8}$

In 32-36, divide. Reduce all answers to lowest terms.

32. $2\frac{2}{3} \div \frac{1}{4}$

33. $4\frac{7}{8} \div \frac{3}{4}$

34. $\frac{4}{5} \div \frac{8}{11}$

35. $\frac{12}{13} \div \frac{26}{27}$

36. $\frac{6}{11} \div \frac{3}{14}$

In 37-47, add. Reduce all answers to lowest terms.

37. $\frac{5}{6} + \frac{4}{7}$ **38.** $\frac{7}{8} + \frac{11}{12}$ **39.** $\frac{1}{9} + \frac{3}{11}$ **40.** $\frac{13}{15} + \frac{5}{24}$

41. $4 + 10\frac{7}{10}$ **42.** $2\frac{1}{2} + 3\frac{7}{10}$ **43.** $6\frac{2}{3} + 2\frac{2}{5}$ **44.** $2\frac{2}{3} + 8\frac{5}{8}$

45. $2\frac{2}{7} + 3\frac{9}{14}$ **46.** $14\frac{1}{2} + 4\frac{2}{3}$ **47.** $6\frac{7}{8} + \frac{8}{9}$

In 48-56, subtract. Reduce all answers to lowest terms.

48. $\frac{5}{9} - \frac{1}{3}$ **49.** $\frac{6}{15} - \frac{3}{25}$ **50.** $\frac{5}{6} - \frac{1}{10}$ **51.** $\frac{9}{10} - \frac{3}{4}$

52. $\frac{7}{8} - \frac{5}{24}$ **53.** $\frac{9}{11} - \frac{1}{3}$ **54.** $\frac{2}{3} - \frac{1}{7}$ **55.** $5\frac{1}{4} - 1\frac{1}{5}$

56. $2\frac{7}{8} - 1\frac{2}{3}$

57. You need to buy 5 notebooks for your classes at school. Each notebook costs $2.79. What is the total cost of 5 notebooks before tax?

58. The sixth grade, which is divided into four classes, holds a fundraising competition. Which class raises the most money per student?

Class	A	B	C	D
Money raised	$450	$425	$560	$390
Students	30	25	35	30

In 59, complete the statement using <, >, or =.

59. $\dfrac{4 \text{ tables}}{3 \text{ groups}}$ ___ $\dfrac{6 \text{ tables}}{5 \text{ groups}}$

60. The ratio of girls to boys in an astronomy club was 5 : 4. There were 24 boys. How many girls were there in the club?

61. A jar of navy beans and white beans are in a ratio of 5 : 3, and 450 of the beans are navy beans. How many beans in total are there in the jar?

62. The ratio of white flour to whole wheat flour in a bread recipe is 2 : 3. The recipe uses 10 cups of flour. How much of each type of flour is needed?

63. You have $50 in your savings account. Each week (w) you deposit $5 in your account. Write an expression used to determine the total amount in your savings account.

64. A pet sitting service charges $23 when you sign up for their service and $19 for each visit. If v represents the number of visits, write an expression which can be used to determine the total charge, in dollars, for v visits?

In 65-66, complete the statement. Round to the nearest hundredth, if necessary. You may use a calculator for these two problems.

65. $145 \text{ lb} \approx$ _____ kg   **1 lb $\approx$ .454 kg**   66. $18 \text{ cm} \approx$ _____ in.   **1 in. $\approx$ 2.54 cm**

In 67-72, solve the equation.

67. $x + 55 = 71$ 68. $x - 32 = 94$ 69. $\frac{x}{3} = 33$

70. $13x = 182$ 71. $x - 5.23 = 16.122$ 72. $x + 13.567 = 45.89$

In 73-76, write the word sentence as an inequality.

73. A number n is no more than 100.

74. 0 is greater than a number x.

75. The difference of number p and 2 is at least 5.

76. A number b divided by 3 is less than 3.

In 77-78, tell whether the given value is a solution of the inequality.

77. $2z \le 15; \; z = 11$ 78. $\frac{k}{3} > 7; \; k = 21$

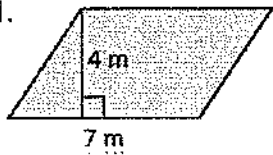**In 79-81, tell whether the two expressions are equivalent.**

79. $5 + 3b; \; 3b + 5$ 80. $5(h + 7); \; 5h + 35$ 81. $(2 - c)4; \; 2 - 4c$

In 82-90, use the Distributive Property to simplify the expression
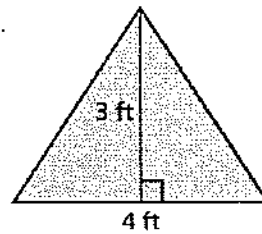
82. $5(p + 8)$ 83. $10(8 + r)$ 84. $7(g + 6)$

85. $8(b + 6)$ 86. $12(3 - m)$ 87. $5(c + 9)$

88. $3(d - 9)$ 89. $6(8 - w)$ 90. $2(150 + n)$

In 91-92, find the area of the figure.

91.

4 m
7 m

92.

3 ft
4 ft

93. In a survey, $\frac{17}{25}$ of the people surveyed have a cat. What percent of the people surveyed have a cat?

In 94-99, you may use a calculator.

94. What is 35% of 76?

95. 8 is what percent of 98?

96. 46% of 203 is what number?

97. What is 29% of 154?

98. 19.44 is what percent of 54?

99. 115% of 98 is what number?

In 100, write the fraction as a decimal.

100. $\frac{13}{20}$