

7th Grade

Math Summer Packet

The summer packet is meant to give you a jump start on the year. Some problems may seem extremely easy and some may cover skills you didn't get to last year. Don't worry about it. We'll go over the summer packet the first week of school. Have your questions ready.

**DO NOT USE A
CALCULATOR!!!!!!**

FYI---- The summer packet is the **Post-Course Test** from your 6th-grade text.



Name _____ Date _____

Post-Course Test

For use after Chapter 13

Find the sum, difference, product, or quotient.

1. $162 \div 6$ 2. $273 - 148$ 3. $44 + 79$ 4. 37×22
5. $407 - 53$ 6. 88×3 7. $153 \div 9$ 8. $18 + 294$

9. You are buying T-shirts for the school store to sell. The T-shirts come in boxes of 48 each. You buy 11 boxes. Estimate the number of T-shirts you buy.

Find the value of the power.

10. 9^3 11. 6 cubed 12. 14 squared

Evaluate the expression.

13. $34 - 16 + 7$ 14. $14 + 8 \div 2$ 15. $\frac{25 \times 4 + 44}{6^2}$

Evaluate the expression when $x = 3$ and $y = 7$.

16. $8x$ 17. $6x \div 2 + y$ 18. $y^2 - 2x$

Find the perimeter and area of the rectangle or square.

21. a square that is 7 in. by 7 in.
22. a rectangle that is 12 ft by 9 ft

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____

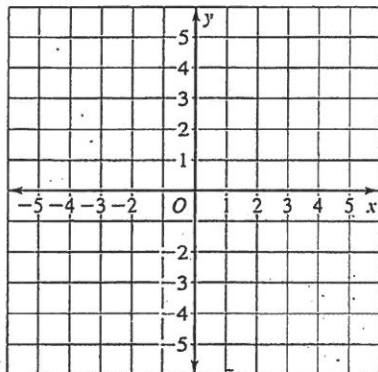
21. _____
22. _____

Post-Course Test

For use after Chapter 13

Graph the points on the same coordinate grid.

24. (2, 5) 25. (4, 0) 26. (-3, 1) 27. (1, -2)



Find the mean, median, mode(s), and range of the data.

28. Number of pieces of mail: 4, 8, 6, 2, 0, 3, 7, 5, 8, 2

29. Average inches of rainfall each month:

3, 2, 3, 3, 3, 4, 3, 4, 5, 4, 4, 4

Write the number as a decimal.

30. eighty-nine ten thousandths

31. twenty-six and fourteen hundredths

Write the decimal in words.

32. 10.362 33. 0.02 34. 0.0793

Complete the statement with $<$, $>$, or $=$.

35. $4.5 \underline{\quad} 5.4$ 36. $16.64 \underline{\quad} 16.57$ 37. $0.32 \underline{\quad} 0.320$

Round the decimal as specified.

38. 21.3528 (nearest tenth) 39. 0.161616 (nearest thousandth)

Find the sum or difference.

40. $4.3 + 8.9$ 41. $15.6 - 7.7$ 42. $9.41 - 5.4$

Find the product.

43. 3×7.64 44. 38.5×4 45. 9.152×11

Answers

24. See left.
25. See left.
26. See left.
27. See left.
28. _____
29. _____
30. _____
31. _____
32. _____
33. _____
34. _____
35. _____
36. _____
37. _____
38. _____
39. _____
40. _____
41. _____
42. _____
43. _____
44. _____
45. _____



Name _____ Date _____

Post-Course Test

For use after Chapter 13

Answers

Find the product or quotient.

49. 8.4×0.79

50. 4.3×0.005

51. $0.45 \div 0.09$

52. $5.76 \div 1.2$

Find the product or quotient using mental math.

53. 21.3×100

54. 58.74×0.01

55. $715 \div 1000$

56. $0.36 \div 0.1$

Copy and complete the statement.

57. $27.9 \text{ kg} = \underline{\quad ? \quad} \text{ g}$

58. $38 \text{ mL} = \underline{\quad ? \quad} \text{ L}$

59. $260 \text{ cm} = \underline{\quad ? \quad} \text{ mm}$

Complete the statement with $<$, $>$, or $=$.

60. $0.73 \text{ kg} \underline{\quad ? \quad} 730 \text{ g}$

61. $210,000 \text{ mL} \underline{\quad ? \quad} 72.1 \text{ kL}$

62. $3 \text{ cm} \underline{\quad ? \quad} 73 \text{ mm}$

Tell whether the number is *prime*, *composite*, or *neither*.

63. 37

64. 39

65. 13

66. 58

Find the GCF of the numbers.

67. 16, 28

68. 24, 38

69. 36, 81

Write two fractions that are equivalent to the given fraction.

70. $\frac{3}{7}$

71. $\frac{1}{9}$

72. $\frac{4}{5}$

Tell whether the fraction is in simplest form. If not, simplify it.

73. $\frac{7}{84}$

74. $\frac{24}{32}$

75. $\frac{9}{14}$

49. _____

50. _____

51. _____

52. _____

53. _____

54. _____

55. _____

56. _____

57. _____

58. _____

59. _____

60. _____

61. _____

62. _____

63. _____

64. _____

65. _____

66. _____

67. _____

68. _____

69. _____

70. _____

71. _____

72. _____

73. _____

74. _____

75. _____

Post-Course Test

For use after Chapter 13

Find the LCM of the numbers.

76. 4, 18

77. 3, 13

78. 5, 6, 12

Rewrite the number as an improper fraction or mixed number.

79. $6\frac{4}{9}$

80. $\frac{37}{4}$

81. $\frac{20}{6}$

Write the decimal as a fraction or mixed number in simplest form.

82. 0.85

83. 5.4

84. 2.11

Find the sum or difference. Write your answer in simplest form.

85. $\frac{5}{9} + \frac{1}{9}$

86. $\frac{4}{15} + \frac{2}{3}$

87. $\frac{7}{10} - \frac{2}{5}$

88. $14\frac{1}{4} - 6\frac{1}{8}$

89. $3\frac{4}{7} + 8\frac{6}{7}$

90. $8\frac{2}{5} - 5\frac{4}{5}$

91. You went shopping with a group of friends from 11:45 A.M. until 3:20 P.M. How long were you shopping?

Find the product or quotient. Write your answer in simplest form.

92. $\frac{5}{9} \times \frac{3}{4}$

93. $3\frac{5}{7} \times 4\frac{3}{8}$

94. $\frac{9}{14} \div \frac{1}{7}$

95. $8 \div 6\frac{2}{7}$

96. A recipe calls for $2\frac{3}{4}$ cups of flour. You already measured $1\frac{2}{3}$ cups. How much more flour do you need?

97. You bought 9 feet of elastic to make hair ties. Each hair tie needs $3\frac{3}{8}$ inches of elastic. How many hair ties can you make?

Answers

76. _____

77. _____

78. _____

79. _____

80. _____

81. _____

82. _____

83. _____

84. _____

85. _____

86. _____

87. _____

88. _____

89. _____

90. _____

91. _____

92. _____

93. _____

94. _____

95. _____

96. _____

97. _____

Post-Course Test

For use after Chapter 13

Write the unit rate.

102. $\frac{161 \text{ miles}}{7 \text{ gallons}}$

103. $\frac{432 \text{ words}}{6 \text{ minutes}}$

104. $\frac{48 \text{ yards}}{8 \text{ seconds}}$

Solve the proportion.

105. $\frac{a}{12} = \frac{6}{36}$

106. $\frac{42}{b} = \frac{3}{8}$

107. $\frac{6}{18} = \frac{c}{24}$

Write the percent as a decimal and a fraction.

108. 8.9%

109. 36%

110. 71%

Write the fraction or decimal as a percent.

111. $\frac{5}{8}$

112. 0.047

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

Find the percent of the number.

114. 40% of 80

115. 6% of 3

116. 28% of 250

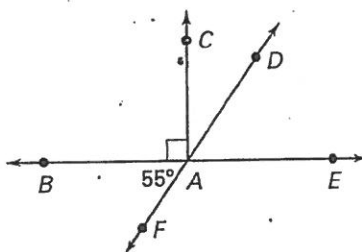
117. A bank account pays 3% annual interest. How much simple interest will \$4500 earn in 5 years?

In Exercises 118–120, use the diagram shown.

118. Name a pair of complementary angles.

119. Find the measure of $\angle DAE$.

120. Find the measure of $\angle FAE$.



Find the area of the figure described.

121. Parallelogram: base = 14 in., height = 32 in.

122. Triangle: base = 8 cm, height = 5 cm

Find the circumference and area of the circle described.

123. $r = 16 \text{ ft}$

124. $d = 350 \text{ mm}$

Answers

102. _____

103. _____

104. _____

105. _____

106. _____

107. _____

108. _____

109. _____

110. _____

111. _____

112. _____

113. _____

114. _____

115. _____

116. _____

117. _____

118. _____

119. _____

120. _____

121. _____

122. _____

123. _____

124. _____

Post-Course Test

For use after Chapter 13

Answers

Find the sum or difference.

128. $12 + (-25)$

129. $-21 + 21$

130. $-2 - 9$

131. $-32 - (-6)$

Find the product or quotient.

132. $-5(-12)$

133. $4(-4)$

134. $36 \div (-9)$

135. $-84 \div (-14)$

Write the sentence as an equation.

136. The product of 6 and a number n is 54.

137. The sum of a number x and 4 is 13.

Solve the equation.

138. $16 + p = 22$

139. $x - 8 = 9$

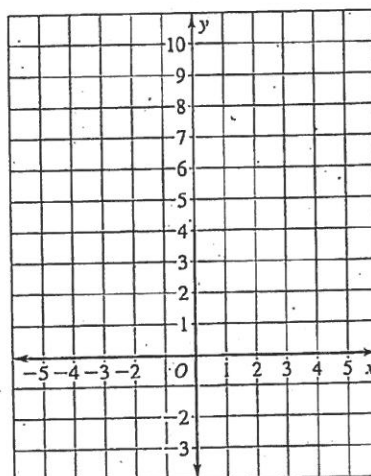
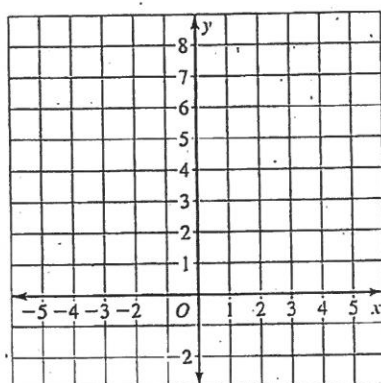
140. $63 = 9n$

141. $\frac{z}{4} = 6$

Make an input-output table using the function rule and the input values $x = 0, 1, 2, 3,$ and 4 . Graph the function.

142. $y = x + 2$

143. $y = 3x - 2$



128. _____

129. _____

130. _____

131. _____

132. _____

133. _____

134. _____

135. _____

136. _____

137. _____

138. _____

139. _____

140. _____

141. _____

142. See left.

143. See left.



Name _____ Date _____

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A box contains 15 tiles numbered 1 through 15. You randomly choose a tile. Find the probability of the event.

- 144. You choose an even number.
- 145. You choose a number less than 20.
- 146. You choose the number 17.
- 147. You choose a multiple of 4.
- 148. Describe the complement of the event in Exercise 147. Then find its probability.

Use the list of data below. The data show the number of students that ride the activity bus each day.

18, 15, 9, 25, 23, 17, 19, 14, 6, 8, 11, 20, 23, 12, 8, 26, 18, 7

Answers

144. _____

145. _____

146. _____

147. _____

148. _____

150. _____

- 150. Find the mean, median, and mode(s).