

6th Grade Summer Math Packet

This packet is for students who completed 5th grade and are entering 6th grade math honors in the Fall.

Completion of this review packet is required. It will be counted as a 25 point assignment based on completion of all problems with work shown.

Calculator use is not permitted.

The packet will be collected by the student's math teacher by the beginning of school in September.

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. $y^2 - 2x$

Choose an appropriate customary unit and metric unit for the length.

19. thickness of a textbook 20. distance of a marathon

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
 23. Make a bar graph of the number of students with a birthday in each season.

Season	Winter	Spring	Summer	Fall
Number of students	9	6	12	8

Answers

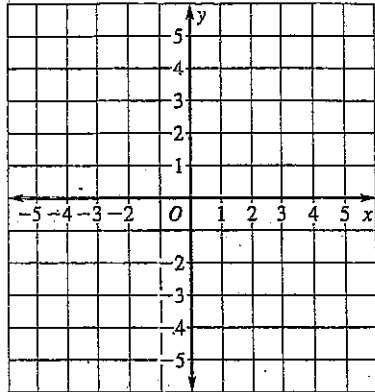
1. _____
 2. _____
 3. _____
 4. _____
 5. _____
 6. _____
 7. _____
 8. _____
 9. _____
 10. _____
 11. _____
 12. _____
 13. _____
 14. _____
 15. _____
 16. _____
 17. _____
 18. _____
 19. _____
 20. _____
 21. _____
 22. _____
 23. See left.

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

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. _____

Post-Course Test

For use after Chapter 13

Use the distributive property to find the product.

46. $4(6 + 3.9)$ 47. $6(43)$ 48. $5(7.2)$

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. $\frac{9}{14}$

Answers

46. _____
47. _____
48. _____
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

Answers

76. _____

77. _____

Rewrite the number as an improper fraction or mixed number.

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

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

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

78. _____

79. _____

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

82. 0.85

83. 5.4

84. 2.11

80. _____

81. _____

82. _____

83. _____

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

84. _____

85. _____

86. _____

87. _____

88. _____

89. _____

90. _____

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

91. _____

92. _____

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

93. _____

94. _____

95. _____

96. _____

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. _____

98. _____

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?

99. _____

100. _____

Complete the statement.

101. _____

98. 3 qt 2 pt = ? pt

99. 87 in. = ? yd ? ft ? in.

Find the sum or difference.

100. 5 ft 8 in. + 7 ft 6 in.

101. 9 lb 4 oz - 2 lb 11 oz

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.

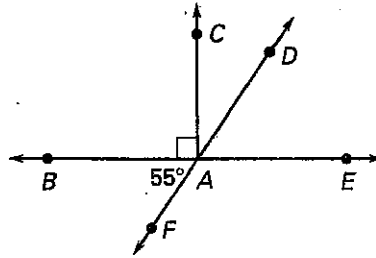
114. 40% of 80

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. $d = 350 \text{ mm}$

125. How many faces, edges, and vertices does a pentagonal prism have?

Answers

102. _____

103. _____

104. _____

105. _____

106. _____

107. _____

108. _____

109. _____

110. _____

111. _____

112. _____

113. _____

114. _____

115. _____

116. _____

117. _____

118. _____

119. _____

120. _____

121. _____

122. _____

123. _____

124. _____

125. _____

Post-Course Test

For use after Chapter 13

Find the surface area and volume of the rectangular prism described.

126. 8 cm by 6 cm by 5 cm 127. 3 in. by 7 in. by 9 in.

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.

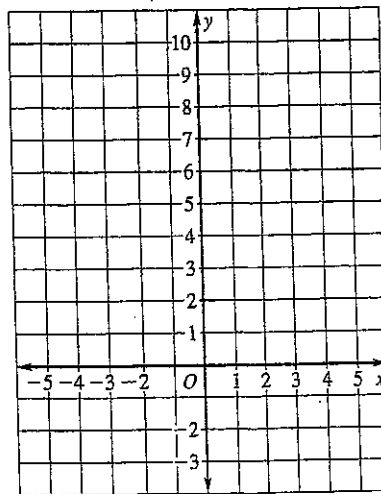
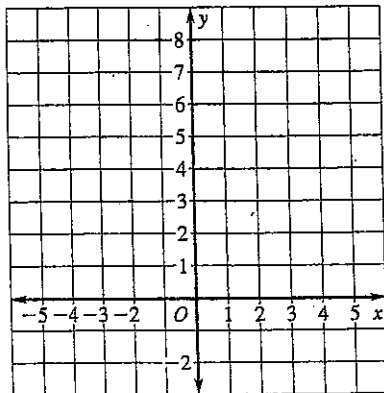
136. The product of 6 and a number n is 54.
137. The sum of a number x and 4 is 13.

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. $y = 3x - 2$



Answers

126. _____
127. _____
128. _____
129. _____
130. _____
131. _____
132. _____
133. _____
134. _____
135. _____
136. _____
137. _____
138. _____
139. _____
140. _____
141. _____
142. See left.
143. See left.