

# Summer Math Exercises

*For students who  
are entering*

## Math 6



It has been discovered that idle students lose learning over the summer months. To help you succeed next fall—and perhaps to help you learn some lessons that you did not learn the first time through—we have prepared the following packet of math exercises to be completed over the summer. It is clear that most students do not want to spend their entire summer doing math work. Based on how fast or slow you work, you may find that you only need to do math a few days a week. Working on this packet will be most effective if you do work throughout the summer so try not to skip weeks. You may use the following chart to get an idea of how often you might need to work problems:

Into Math 6  
Problems: 178

<u>Days/Wk</u>	<u>Min/Day</u>	<u>Min/Prob</u>	<u>Prob/Day</u>	<u>Sessions</u>
4	60	2	30	6
4	60	3	20	9
4	60	5	12	15
4	45	2	22.5	8
4	45	3	15	12
4	45	5	9	20
4	30	2	15	12
4	30	3	10	18
4	30	5	6	30

For example, if you work on math for 60 minutes per session and took 2 minutes per problem, you could complete 30 problems a day. That would equate to only about 6 sessions of working math problems over the summer. At the other end of the spectrum, if you want to work only 30 minutes each time and took on average 5 minutes to complete each problem, you would only get 6 problems done during a session and would have to do about 30 sessions to complete the work (i.e., math work about every other day during the summer break). Note that students who learned the material previously should not take more than an average of 5 minutes to work a problem.

This work is **MANDATORY** for CCA students. Please follow these guidelines:

- Complete the problems assigned on the next page.
- Bring the completed work to the **first day of classes** so you will get credit.
- Use PENCIL and **write legibly**.
- Please write your **answers in the answer blanks**. Also, use the graphs and tables provided to answer those questions.
- Do all your work on **separate sheets of paper**.

Round each number as directed.

$$1. \quad 417 \quad \begin{array}{c} \text{Tens} \\ \hline \\ \text{Tenths} \\ \hline \end{array} \quad \begin{array}{c} \text{Hundreds} \\ \hline \\ \text{Hundredths} \\ \hline \end{array}$$

$$3. \quad 89.621 \quad \begin{array}{c} \hline \\ \hline \end{array} \quad \begin{array}{c} \hline \\ \hline \end{array}$$

$$2. \quad 70,861 \quad \begin{array}{c} \text{Hundreds} \\ \hline \\ \text{Tenths} \\ \hline \end{array} \quad \begin{array}{c} \text{Thousands} \\ \hline \\ \text{Hundredths} \\ \hline \end{array}$$

$$4. \quad 1.0268 \quad \begin{array}{c} \hline \\ \hline \end{array} \quad \begin{array}{c} \hline \\ \hline \end{array}$$

Perform the indicated operations.

$$5. \quad 108 + 99 = \underline{\hspace{2cm}}$$

$$7. \quad 982 + 392 = \underline{\hspace{2cm}}$$

$$9. \quad 108 - 99 = \underline{\hspace{2cm}}$$

$$11. \quad 982 - 392 = \underline{\hspace{2cm}}$$

$$13. \quad 7 + 8 + 12 + 29 = \underline{\hspace{2cm}}$$

$$15. \quad 9 \times 26 = \underline{\hspace{2cm}}$$

$$17. \quad 88 \times 90 = \underline{\hspace{2cm}}$$

$$19. \quad 288 \div 8 = \underline{\hspace{2cm}}$$

$$21. \quad 9159 \div 43 = \underline{\hspace{2cm}}$$

$$23. \quad 8 \times 2 \times 6 \times 9 = \underline{\hspace{2cm}}$$

$$25. \quad 87.37 + 2.9 = \underline{\hspace{2cm}}$$

$$27. \quad 63.21 - 40.8 = \underline{\hspace{2cm}}$$

$$29. \quad 23.8 \times 12.3 = \underline{\hspace{2cm}}$$

$$31. \quad 9.2 \div 0.2 = \underline{\hspace{2cm}}$$

$$33. \quad 12.4 + 9.2 + 60.7 = \underline{\hspace{2cm}}$$

$$35. \quad 7 \times 0.2 \times 0.8 = \underline{\hspace{2cm}}$$

$$6. \quad 8928 + 82 = \underline{\hspace{2cm}}$$

$$8. \quad 4881 + 1770 = \underline{\hspace{2cm}}$$

$$10. \quad 828 - 82 = \underline{\hspace{2cm}}$$

$$12. \quad 481 - 177 = \underline{\hspace{2cm}}$$

$$14. \quad 873 + 902 + 78 = \underline{\hspace{2cm}}$$

$$16. \quad 109 \times 67 = \underline{\hspace{2cm}}$$

$$18. \quad 782 \times 44 = \underline{\hspace{2cm}}$$

$$20. \quad 58384 \div 82 = \underline{\hspace{2cm}}$$

$$22. \quad 5185 \div 17 = \underline{\hspace{2cm}}$$

$$24. \quad 7 \times 12 \times 93 = \underline{\hspace{2cm}}$$

$$26. \quad 2.0421 + 1.8 = \underline{\hspace{2cm}}$$

$$28. \quad 1.269 - 0.801 = \underline{\hspace{2cm}}$$

$$30. \quad 9.002 \times 7 = \underline{\hspace{2cm}}$$

$$32. \quad 7.35 \div 3.5 = \underline{\hspace{2cm}}$$

$$34. \quad 4.09 + 72.8 + 0.8 = \underline{\hspace{2cm}}$$

$$36. \quad 0.01 \times 0.02 \times 5 = \underline{\hspace{2cm}}$$

Round each number as directed.

37. 855      Tens      Hundreds  
                  \_\_\_\_\_      \_\_\_\_\_  
                  Hundredths      Thousandths

38. 19,812      Hundreds      Thousands  
                  \_\_\_\_\_      \_\_\_\_\_  
                  Hundredths      Thousandths

39. 8.098      \_\_\_\_\_      \_\_\_\_\_

40. 9.5406      \_\_\_\_\_      \_\_\_\_\_

Perform the indicated operations.

41. 509 + 483 = \_\_\_\_\_

42. 1609 + 981 = \_\_\_\_\_

43. 722 + 636 = \_\_\_\_\_

44. 7953 + 4934 = \_\_\_\_\_

45. 509 - 483 = \_\_\_\_\_

46. 1609 - 981 = \_\_\_\_\_

47. 722 - 636 = \_\_\_\_\_

48. 7953 - 4934 = \_\_\_\_\_

49. 27 + 16 + 8 + 3 = \_\_\_\_\_

50. 55 + 7 + 136 + 47 = \_\_\_\_\_

51. 8 × 22 = \_\_\_\_\_

52. 559 × 38 = \_\_\_\_\_

53. 15 × 62 = \_\_\_\_\_

54. 37 × 73 = \_\_\_\_\_

55. 873 ÷ 9 = \_\_\_\_\_

56. 987 ÷ 47 = \_\_\_\_\_

57. 6576 ÷ 24 = \_\_\_\_\_

58. 9568 ÷ 46 = \_\_\_\_\_

59. 4 × 4 × 7 × 3 × 2 = \_\_\_\_\_

60. 43 × 8 × 71 = \_\_\_\_\_

61. 0.006 + 4.89 = \_\_\_\_\_

62. 0.88 + 4.818 = \_\_\_\_\_

63. 6.118 - 3.777 = \_\_\_\_\_

64. 21.01 - 12.7 = \_\_\_\_\_

65. 9.01 × 68 = \_\_\_\_\_

66. 8.73 × 66 = \_\_\_\_\_

67. 1000 ÷ 0.5 = \_\_\_\_\_

68. 7.991 ÷ 0.61 = \_\_\_\_\_

69. 7.6 + 0.8 + 3.46 = \_\_\_\_\_

70. 0.05+0.8+0.79 = \_\_\_\_\_

71. 7.5 × 0.08 × 25 = \_\_\_\_\_

72. 7 × 0.08 × 0.3 = \_\_\_\_\_

Write the fractions in lowest terms.

73.  $\frac{2}{8} =$  \_\_\_\_\_      74.  $\frac{8}{24} =$  \_\_\_\_\_      75.  $\frac{16}{24} =$  \_\_\_\_\_      76.  $\frac{55}{66} =$  \_\_\_\_\_

Change to a mixed number in lowest terms.

77.  $\frac{14}{4} =$  \_\_\_\_\_      78.  $\frac{26}{5} =$  \_\_\_\_\_      79.  $\frac{41}{18} =$  \_\_\_\_\_

Change each fraction to a decimal.

80.  $\frac{1}{8} =$  \_\_\_\_\_      81.  $\frac{4}{5} =$  \_\_\_\_\_      82.  $\frac{18}{20} =$  \_\_\_\_\_

Change each decimal to a fraction in lowest terms.

83. 0.75 = \_\_\_\_\_      84. 0.15 = \_\_\_\_\_      85. 0.65 = \_\_\_\_\_

Which fraction is greater?

86.  $\frac{1}{2}$  or  $\frac{3}{5}$ ? \_\_\_\_\_      87.  $\frac{1}{2}$  or  $\frac{4}{9}$ ? \_\_\_\_\_      88.  $\frac{3}{10}$  or  $\frac{1}{3}$ ? \_\_\_\_\_

Write >, < or = in each blank.

89. 0.5 \_\_\_\_\_ 0.05      90. 0.91 \_\_\_\_\_ 0.909      91. 1.9 \_\_\_\_\_ 2

Express each fraction as a percent.

92.  $\frac{1}{2} =$  \_\_\_\_\_      93.  $\frac{7}{10} =$  \_\_\_\_\_      94.  $\frac{4}{5} =$  \_\_\_\_\_

95.  $\frac{1}{4} =$  \_\_\_\_\_      96.  $\frac{2}{5} =$  \_\_\_\_\_      97.  $\frac{1}{10} =$  \_\_\_\_\_

Write the fractions in lowest terms.

$$98. \frac{56}{64} = \underline{\hspace{2cm}}$$

$$99. \frac{16}{36} = \underline{\hspace{2cm}}$$

$$100. \frac{15}{35} = \underline{\hspace{2cm}}$$

$$101. \frac{4}{96} = \underline{\hspace{2cm}}$$

Change to a mixed number in lowest terms.

$$102. \frac{40}{6} = \underline{\hspace{2cm}}$$

$$103. \frac{70}{12} = \underline{\hspace{2cm}}$$

$$104. \frac{33}{6} = \underline{\hspace{2cm}}$$

Change each fraction to a decimal.

$$105. \frac{3}{8} = \underline{\hspace{2cm}}$$

$$106. \frac{11}{25} = \underline{\hspace{2cm}}$$

$$107. \frac{40}{200} = \underline{\hspace{2cm}}$$

Change each decimal to a fraction in lowest terms.

$$108. \quad 0.8 = \underline{\hspace{2cm}}$$

$$109. \quad 0.1 = \underline{\hspace{2cm}}$$

$$110. \quad 0.35 = \underline{\hspace{2cm}}$$

Which fraction is greater?

$$111. \frac{8}{15} \text{ or } \frac{3}{5} ? \underline{\hspace{2cm}}$$

$$112. \frac{9}{10} \text{ or } \frac{8}{9} ? \underline{\hspace{2cm}}$$

$$113. \frac{7}{8} \text{ or } \frac{3}{4} ? \underline{\hspace{2cm}}$$

Write  $>$ ,  $<$  or  $=$  in each blank.

$$114. \quad 0.4 \quad 0.51 \quad \underline{\hspace{2cm}}$$

$$115. \quad 0.7 \quad 0.681 \quad \underline{\hspace{2cm}}$$

$$116. \quad 8.1 \quad 8 \quad \underline{\hspace{2cm}}$$

Write the number that makes the fractions equivalent.

$$117. \frac{1}{4} = \frac{\hspace{1cm}}{28}$$

$$118. \frac{3}{5} = \frac{\hspace{1cm}}{20}$$

$$119. \frac{8}{9} = \frac{\hspace{1cm}}{18}$$

$$120. \frac{4}{10} = \frac{\hspace{1cm}}{100}$$

$$121. \frac{3}{7} = \frac{\hspace{1cm}}{21}$$

$$122. \frac{1}{2} = \frac{\hspace{1cm}}{44}$$

Perform the indicated operations.

$$123. \frac{3}{8} + \frac{1}{8} = \underline{\hspace{2cm}}$$

$$124. \frac{1}{4} + \frac{1}{5} = \underline{\hspace{2cm}}$$

$$125. \frac{1}{3} + \frac{2}{7} = \underline{\hspace{2cm}}$$

$$126. \frac{3}{4} + \frac{1}{6} = \underline{\hspace{2cm}}$$

$$127. \frac{3}{7} + \frac{1}{2} = \underline{\hspace{2cm}}$$

$$128. \frac{2}{9} + \frac{1}{3} = \underline{\hspace{2cm}}$$

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$$129. \frac{10}{11} - \frac{4}{11} = \underline{\hspace{2cm}}$$

$$130. \frac{4}{5} - \frac{1}{2} = \underline{\hspace{2cm}}$$

$$131. \frac{5}{11} - \frac{1}{22} = \underline{\hspace{2cm}}$$

$$132. \frac{9}{10} - \frac{5}{6} = \underline{\hspace{2cm}}$$

$$133. \frac{14}{25} - \frac{1}{10} = \underline{\hspace{2cm}}$$

$$134. \frac{7}{8} - \frac{1}{16} = \underline{\hspace{2cm}}$$

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$$135. \frac{2}{3} \times \frac{1}{3} = \underline{\hspace{2cm}}$$

$$136. \frac{3}{4} \times \frac{2}{3} = \underline{\hspace{2cm}}$$

$$137. \frac{3}{7} \times \frac{14}{27} = \underline{\hspace{2cm}}$$

$$138. \frac{3}{10} \times \frac{22}{9} = \underline{\hspace{2cm}}$$

$$139. \frac{44}{50} \times \frac{10}{11} = \underline{\hspace{2cm}}$$

$$140. \frac{21}{28} \times \frac{3}{7} = \underline{\hspace{2cm}}$$

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$$141. \frac{1}{5} \div \frac{1}{3} = \underline{\hspace{2cm}}$$

$$142. \frac{4}{7} \div \frac{8}{9} = \underline{\hspace{2cm}}$$

$$143. \frac{5}{13} \div \frac{15}{26} = \underline{\hspace{2cm}}$$

$$144. \frac{2}{3} \div \frac{4}{5} = \underline{\hspace{2cm}}$$

$$145. \frac{7}{8} \div \frac{14}{15} = \underline{\hspace{2cm}}$$

$$146. \frac{5}{9} \div \frac{10}{13} = \underline{\hspace{2cm}}$$

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$$147. 8 \frac{1}{2} + 1 \frac{1}{4} = \underline{\hspace{2cm}}$$

$$148. 2 \frac{2}{3} + 1 \frac{1}{12} = \underline{\hspace{2cm}}$$

$$149. 12 \frac{3}{5} - 4 \frac{1}{10} = \underline{\hspace{2cm}}$$

$$150. 8 \frac{1}{2} - 2 \frac{1}{10} = \underline{\hspace{2cm}}$$

Perform the indicated operations.

$$151. \frac{4}{11} + \frac{1}{11} = \underline{\hspace{2cm}} \quad 152. \frac{1}{5} + \frac{3}{10} = \underline{\hspace{2cm}} \quad 153. \frac{2}{5} + \frac{1}{3} = \underline{\hspace{2cm}}$$

$$154. \frac{7}{10} + \frac{1}{20} = \underline{\hspace{2cm}} \quad 155. \frac{2}{15} + \frac{2}{5} = \underline{\hspace{2cm}} \quad 156. \frac{3}{16} + \frac{1}{16} = \underline{\hspace{2cm}}$$

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$$157. \frac{24}{25} - \frac{9}{25} = \underline{\hspace{2cm}} \quad 158. \frac{1}{2} - \frac{1}{10} = \underline{\hspace{2cm}} \quad 159. \frac{9}{11} - \frac{2}{33} = \underline{\hspace{2cm}}$$

$$160. \frac{2}{7} - \frac{1}{14} = \underline{\hspace{2cm}} \quad 161. \frac{7}{15} - \frac{1}{5} = \underline{\hspace{2cm}} \quad 162. \frac{4}{5} - \frac{3}{4} = \underline{\hspace{2cm}}$$

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$$163. \frac{4}{9} \times \frac{15}{44} = \underline{\hspace{2cm}} \quad 164. \frac{72}{81} \times \frac{6}{8} = \underline{\hspace{2cm}} \quad 165. \frac{11}{19} \times \frac{11}{40} = \underline{\hspace{2cm}}$$

$$166. \frac{16}{33} \times \frac{22}{64} = \underline{\hspace{2cm}} \quad 167. \frac{4}{77} \times \frac{99}{111} = \underline{\hspace{2cm}} \quad 168. \frac{45}{50} \times \frac{25}{70} = \underline{\hspace{2cm}}$$

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$$169. \frac{2}{7} \div \frac{1}{2} = \underline{\hspace{2cm}} \quad 170. \frac{8}{21} \div \frac{8}{9} = \underline{\hspace{2cm}} \quad 171. \frac{1}{16} \div \frac{3}{12} = \underline{\hspace{2cm}}$$

$$172. \frac{3}{8} \div \frac{1}{2} = \underline{\hspace{2cm}} \quad 173. \frac{2}{5} \div \frac{6}{10} = \underline{\hspace{2cm}} \quad 174. \frac{20}{50} \div \frac{15}{30} = \underline{\hspace{2cm}}$$

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$$175. 7 \frac{1}{2} \times 4 \frac{1}{3} = \underline{\hspace{2cm}} \quad 176. 5 \frac{3}{5} \div 3 \frac{1}{2} = \underline{\hspace{2cm}}$$

$$177. 2 \frac{3}{4} \times 1 \frac{1}{5} = \underline{\hspace{2cm}} \quad 178. 4 \frac{1}{2} \div 1 \frac{1}{5} = \underline{\hspace{2cm}}$$