

# Summer Math Exercises

*For students who  
are entering*

## Math 5



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:

Problems: 169

<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	8
4	60	5	12	14
4	45	2	22.5	8
4	45	3	15	11
4	45	5	9	19
4	30	2	15	11
4	30	3	10	17
4	30	5	6	28

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 28 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**.

Name: \_\_\_\_\_

$$\begin{array}{r} 1. \ 983 \\ \ 659 \\ \ 742 \\ + \underline{855} \end{array}$$

$$\begin{array}{r} 4. \ 5,732 \\ \ \ 8,957 \\ + \underline{4,639} \end{array}$$

$$\begin{array}{r} 7. \ 57,742 \\ \ 68,783 \\ \ 53,904 \\ + \underline{18,155} \end{array}$$

$$\begin{array}{r} 10. \ 24,563 \\ \ 87,925 \\ \ 42,814 \\ \ 76,427 \\ + \underline{11,852} \end{array}$$

$13. \ 87 + 25 = \underline{\hspace{2cm}}$

$14. \ 59 + 73 = \underline{\hspace{2cm}}$

$15. \ 69 + 34 = \underline{\hspace{2cm}}$

$$\begin{array}{r} 2. \ 480 \\ \ 975 \\ \ 488 \\ + \underline{932} \end{array}$$

$$\begin{array}{r} 5. \ 7,939 \\ \ \ 652 \\ + \underline{8,204} \end{array}$$

$$\begin{array}{r} 8. \ 15,031 \\ \ 76,372 \\ \ 19,849 \\ + \underline{6,725} \end{array}$$

$$\begin{array}{r} 11. \ 50,726 \\ \ 97,034 \\ \ 15,355 \\ \ 53,495 \\ + \underline{75,617} \end{array}$$

$16. \ 132 + 236 = \underline{\hspace{2cm}}$

$17. \ 109 + 732 = \underline{\hspace{2cm}}$

$$\begin{array}{r} 3. \ 294 \\ \ 789 \\ \ 357 \\ + \underline{489} \end{array}$$

$$\begin{array}{r} 6. \ 6,162 \\ \ 7,325 \\ + \underline{5,183} \end{array}$$

$$\begin{array}{r} 9. \ 99,999 \\ \ 88,888 \\ \ 77,777 \\ + \underline{6,666} \end{array}$$

$$\begin{array}{r} 12. \ 89,450 \\ \ 75,038 \\ \ 19,915 \\ \ 7,844 \\ + \underline{64,925} \end{array}$$

$18. \ 387 + 825 = \underline{\hspace{2cm}}$

$$\begin{array}{r} 19. \ 100 \\ - \underline{48} \end{array}$$

$$\begin{array}{r} 24. \ 1,090 \\ - \underline{988} \end{array}$$

$29. \ 18 \times 5 = \underline{\hspace{2cm}}$

$$\begin{array}{r} 35. \ 32 \\ \times \underline{59} \end{array}$$

$40. \ 12 \times 21 = \underline{\hspace{2cm}}$

$$\begin{array}{r} 20. \ 203 \\ - \underline{58} \end{array}$$

$$\begin{array}{r} 25. \ 3,000 \\ - \underline{2,821} \end{array}$$

$30. \ 24 \times 8 = \underline{\hspace{2cm}}$

$$\begin{array}{r} 36. \ 83 \\ \times \underline{76} \end{array}$$

$41. \ 48 \times 95 = \underline{\hspace{2cm}}$

$31. \ 93 \times 6 = \underline{\hspace{2cm}}$

$42. \ 77 \times 48 = \underline{\hspace{2cm}}$

$$\begin{array}{r} 21. \ 700 \\ - \underline{251} \end{array}$$

$$\begin{array}{r} 26. \ 6,203 \\ - \underline{1,624} \end{array}$$

$32. \ 18 \times 9 = \underline{\hspace{2cm}}$

$$\begin{array}{r} 37. \ 582 \\ \times \underline{97} \end{array}$$

$43. \ 36 \times 63 = \underline{\hspace{2cm}}$

$$\begin{array}{r} 22. \ 963 \\ - \underline{369} \end{array}$$

$$\begin{array}{r} 27. \ 8,642 \\ - \underline{2,468} \end{array}$$

$33. \ 50 \times 7 = \underline{\hspace{2cm}}$

$$\begin{array}{r} 38. \ 222 \\ \times \underline{44} \end{array}$$

$44. \ 98 \times 57 = \underline{\hspace{2cm}}$

$34. \ 77 \times 5 = \underline{\hspace{2cm}}$

$45. \ 88 \times 88 = \underline{\hspace{2cm}}$

$$\begin{array}{r} 23. \ 651 \\ - \underline{275} \end{array}$$

$$\begin{array}{r} 28. \ 5,831 \\ - \underline{2,842} \end{array}$$

$$\begin{array}{r} 39. \ 859 \\ \times \underline{64} \end{array}$$

46.  $3 \overline{)75}$

51.  $9 \overline{)1,504}$

55.  $6 \overline{)5,564}$

59.  $41 \overline{)287}$

63.  $32 \overline{)1,792}$

47.  $8 \overline{)96}$

52.  $8 \overline{)2,592}$

56.  $9 \overline{)4,537}$

60.  $72 \overline{)432}$

64.  $49 \overline{)2,597}$

48.  $4 \overline{)76}$

53.  $7 \overline{)4,368}$

57.  $8 \overline{)2,123}$

61.  $59 \overline{)742}$

65.  $75 \overline{)6,600}$

49.  $9 \overline{)99}$

50.  $5 \overline{)95}$

54.  $4 \overline{)3,316}$

58.  $5 \overline{)7,814}$

62.  $37 \overline{)518}$

66.  $87 \overline{)4,524}$

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67.  $18 \overline{)4,050}$

68.  $26 \overline{)6,786}$

69.  $65 \overline{)19,825}$

70.  $39 \overline{)5,224}$

71.  $83 \overline{)9,642}$

72.  $57 \overline{)8,432}$

Average the numbers.

$$\begin{array}{r} 73. \quad 93 \\ \quad 82 \\ \quad 77 \\ \quad 85 \\ \quad 90 \\ \quad 89 \\ \hline \end{array}$$

$$\begin{array}{r} 74. \quad 103 \\ \quad 172 \\ \quad 98 \\ \quad 124 \\ \quad 157 \\ \quad 161 \\ \hline \end{array}$$

Write each fraction.

75. three fourths

76. nine tenths

77. four sevenths

78. one fifth

Simplify these fractions to lowest terms.

$$79. \frac{5}{15} =$$

$$81. \frac{3}{18} =$$

$$83. \frac{2}{20} =$$

$$85. \frac{18}{27} =$$

$$87. \frac{120}{138} =$$

$$80. \frac{3}{9} =$$

$$82. \frac{6}{24} =$$

$$84. \frac{15}{21} =$$

$$86. \frac{25}{85} =$$

$$88. \frac{117}{153} =$$

Change the improper fractions to mixed numbers.

$$89. \frac{13}{4} =$$

$$91. \frac{75}{8} =$$

$$93. \frac{43}{6} =$$

$$90. \frac{40}{6} =$$

$$92. \frac{82}{9} =$$

$$94. \frac{52}{7} =$$

Add or subtract the mixed numbers.

$$\begin{array}{r} 95. \quad 2\frac{2}{7} \\ + \quad 5\frac{3}{7} \\ \hline \end{array}$$

$$\begin{array}{r} 96. \quad 6\frac{1}{8} \\ + \quad 3\frac{2}{8} \\ \hline \end{array}$$

$$\begin{array}{r} 97. \quad 7\frac{2}{5} \\ + \quad 1\frac{2}{5} \\ \hline \end{array}$$

$$\begin{array}{r} 98. \quad 8\frac{7}{13} \\ - \quad 5\frac{5}{13} \\ \hline \end{array}$$

$$\begin{array}{r} 99. \quad 9\frac{8}{11} \\ - \quad 8\frac{2}{11} \\ \hline \end{array}$$

$$\begin{array}{r} 100. \quad 3\frac{8}{9} \\ - \quad 3\frac{3}{9} \\ \hline \end{array}$$

Perform the indicated operations.

$$\begin{array}{r} 101. \quad 1\frac{1}{2} \\ + \quad 2\frac{1}{8} \\ \hline \end{array}$$

$$\begin{array}{r} 102. \quad 4\frac{1}{9} \\ + \quad 4\frac{1}{3} \\ \hline \end{array}$$

$$\begin{array}{r} 103. \quad 7\frac{1}{3} \\ + \quad 6\frac{5}{12} \\ \hline \end{array}$$

$$\begin{array}{r} 104. \quad 11\frac{2}{5} \\ + \quad 12\frac{1}{2} \\ \hline \end{array}$$

$$\begin{array}{r} 105. \quad 24\frac{3}{10} \\ + \quad 7\frac{2}{5} \\ \hline \end{array}$$

$$\begin{array}{r} 106. \quad 6\frac{4}{9} \\ + \quad 84\frac{4}{27} \\ \hline \end{array}$$

$$\begin{array}{r} 107. \quad 44\frac{4}{11} \\ + \quad 55\frac{3}{22} \\ \hline \end{array}$$

$$\begin{array}{r} 108. \quad 42\frac{3}{15} \\ + \quad 9\frac{1}{45} \\ \hline \end{array}$$

$$\begin{array}{r} 109. \quad 8\frac{7}{8} \\ + \quad 16\frac{1}{2} \\ \hline \end{array}$$

$$\begin{array}{r} 110. \quad 29\frac{11}{12} \\ + \quad 21\frac{15}{16} \\ \hline \end{array}$$

$$\begin{array}{r} 111. \quad 51\frac{5}{8} \\ + \quad 14\frac{1}{4} \\ \hline \end{array}$$

$$\begin{array}{r} 112. \quad 44\frac{6}{11} \\ + \quad 88\frac{1}{3} \\ \hline \end{array}$$

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$$\begin{array}{r} 113. \quad 21\frac{7}{8} \\ - \quad 5\frac{1}{2} \\ \hline \end{array}$$

$$\begin{array}{r} 114. \quad 11\frac{4}{5} \\ - \quad 8\frac{3}{10} \\ \hline \end{array}$$

$$\begin{array}{r} 115. \quad 51\frac{5}{8} \\ - \quad 14\frac{1}{4} \\ \hline \end{array}$$

$$\begin{array}{r} 116. \quad 30\frac{11}{12} \\ - \quad 8\frac{3}{16} \\ \hline \end{array}$$

$$\begin{array}{r} 117. \quad 21\frac{1}{8} \\ - \quad 5\frac{1}{2} \\ \hline \end{array}$$

$$\begin{array}{r} 118. \quad 16\frac{3}{10} \\ - \quad 8\frac{1}{20} \\ \hline \end{array}$$

$$\begin{array}{r} 119. \quad 45\frac{3}{8} \\ - \quad 32\frac{3}{4} \\ \hline \end{array}$$

$$\begin{array}{r} 120. \quad 81\frac{3}{4} \\ - \quad 27\frac{5}{6} \\ \hline \end{array}$$

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$$121. \quad \frac{5}{6} - \frac{5}{8} =$$

$$122. \quad \frac{5}{7} - \frac{2}{3} =$$

$$123. \quad 10 - \frac{5}{8} =$$

$$124. \quad 90 - \frac{7}{90} =$$

Multiply. Make sure products are simplified to lowest terms.

125.  $\frac{1}{5} \times \frac{1}{4} =$

126.  $\frac{2}{3} \times \frac{4}{5} =$

127.  $\frac{3}{5} \times \frac{6}{7} =$

128.  $\frac{1}{7} \times \frac{3}{4} =$

129.  $\frac{2}{5} \times \frac{1}{4} =$

130.  $\frac{3}{5} \times \frac{5}{6} =$

131.  $\frac{1}{4} \times \frac{6}{7} =$

132.  $\frac{3}{4} \times \frac{5}{6} =$

Use cancellation if possible. Make sure products are simplified to lowest terms.

133.  $\frac{3}{8} \times \frac{4}{5} =$

134.  $\frac{3}{7} \times \frac{14}{15} =$

135.  $\frac{2}{3} \times \frac{6}{7} =$

136.  $\frac{5}{6} \times \frac{4}{5} =$

137.  $\frac{9}{10} \times \frac{5}{6} =$

138.  $\frac{2}{5} \times \frac{6}{7} =$

139.  $\frac{2}{7} \times \frac{7}{18} =$

140.  $\frac{4}{9} \times \frac{3}{8} =$

141.  $9 \times \frac{5}{6} =$

142.  $16 \times \frac{5}{8} =$

143.  $12 \times \frac{2}{3} =$

144.  $15 \times \frac{1}{5} =$

145.  $4 \frac{7}{9} \times 54 =$  \_\_\_\_\_

146.  $5 \frac{5}{6} \times 18 =$  \_\_\_\_\_

147.  $\frac{9}{22} \times \frac{2}{9} =$

148.  $6 \frac{2}{3} \times 27 =$  \_\_\_\_\_

149.  $8 \frac{3}{4} \times 12 =$  \_\_\_\_\_

150.  $\frac{16}{81} \times \frac{3}{8} =$

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Write each fraction as a decimal.

151.  $\frac{9}{10} =$  \_\_\_\_\_

152.  $\frac{91}{100} =$  \_\_\_\_\_

153.  $\frac{91}{1000} =$  \_\_\_\_\_

154.  $\frac{910}{1000} =$  \_\_\_\_\_

Write <, >, or =.

155.  $0.2$  \_\_\_\_\_  $0.17$

156.  $0.4$  \_\_\_\_\_  $0.39$

157.  $0.03$  \_\_\_\_\_  $0.1$

Perform the indicated operations.

158.  $4.2 + 6.5 =$  \_\_\_\_\_

163.  $71.6 + 48.50 =$  \_\_\_\_\_

159.  $5.5 + 5.5 =$  \_\_\_\_\_

164.  $12.36 + 17.29 =$  \_\_\_\_\_

160.  $8.4 + 61.8 =$  \_\_\_\_\_

165.  $29.91 + 60.48 =$  \_\_\_\_\_

161.  $9.3 - 2.6 =$  \_\_\_\_\_

166.  $42.10 - 28.42 =$  \_\_\_\_\_

162.  $8.5 - 2.6 =$  \_\_\_\_\_

167.  $4.321 - 1.488 =$  \_\_\_\_\_