


Name _____ Date: _____ Class: _____

Rising 7th Grade Summer Math: Review of 6th Grade

Directions: Using what you learned in 6th grade math, solve each problem below. Show your work in the space provided, and place your answer on the line. If you need more space to do your work, attach extra paper, but be sure to organize it! Read each question carefully! **NO CALCULATORS!**

UNIT 1: PLACE VALUE

<p>1. What is the value of the underlined digit? 2,1<u>9</u>3,327</p>	<p>2. Order the numbers from least to greatest. 0.075, 0.049, 0.07, 0.05</p> <p>_____</p>
<p>3. Write 3,059,172 in word form.</p>	<p>4. Write nine hundred seventeen thousand, one hundred sixty-five in standard form.</p> <p>_____</p>
<p>5. Use >, =, or < to complete the statement.</p> <p>a) 0.23 _____ 0.12</p> <p>b) 7.60 _____ 7.6</p>	<p>6. Lupe is a helper in the school library. She wants to arrange the books on her cart in order from greatest to least book number. If the numbers on the books are 337.43, 338.2, 338.41, and 338.17, in what order should she arrange them?</p>
<p>7. Write using an exponent. Then give its value. 5•5•5•5</p> <p>= _____ = _____</p>	<p>8. Write 4^3 as a product (without exponents). Then give its value.</p> <p>= _____ = _____</p>
<p>9. What is the prime factorization of 125? If there is a repeated factor, use exponents.</p>	<p>10. What is the prime factorization of 36? If there is a repeated factor, use exponents.</p> <p>_____</p>
<p>11. Write using an exponent. 2•2•2</p> <p>= _____</p>	<p>12. Write 4,385 in expanded form using powers of 10.</p>
<p>13. Write in standard form: 50,000 + 5,000 + 900 + 70 + 1</p> <p>= _____</p>	<p>14. Write in standard form: 300,000 + 6,000 + 600 + 10 + 3</p> <p>= _____</p>

<p>15. In 2003, the average attendance per game for the Florida Marlins was about $(1 \times 10^4) + (1 \times 10^3) + (4 \times 10^2)$. What is this number in standard form?</p> <p>= _____</p>	<p>16. What is the value of the digit 3 in the population of Maryland? Give your answer in short word form.</p>  <p>MARYLAND: Population 5,300,000</p> <p>SHORT WORD FORM:</p>
<p>17. What is the value of the digit 7 in 41,728?</p>	<p>18. Write 12.49 in expanded form.</p>
<p>19. Write sixteen thousandths as a decimal.</p> <p>_____</p>	<p>20. Write $80,000,000 + 90,000 + 6,000 + 500$ in standard form and in words.</p> <p>a) Standard form:</p> <p>b) Word form:</p>
<p>21. Jonas' father talks about releasing one of the identical twins. He selects the baby with the lowest birth weight to be released. Compare the following birth weights. Write <, >, or =.</p> <p>a.) 7.56 lbs _____ 7.6 lbs</p> <p>b.) 5.775 lbs _____ 5.78 lbs</p> <p>c.) 6.1 lbs _____ 6.10lbs</p>	<p>22. Write two thousand, one hundred eighteen and sixteen hundredths in:</p> <p>a) standard notation:</p> <p>b) B) expanded notation (using multiplication):</p> <p>c) expanded notation (using powers):</p>

UNIT 2: DECIMALS & SCIENTIFIC NOTATION

<p>23. Find the sum:</p> <p style="text-align: center;">$561 + 1318$</p> <p>= _____</p>	<p>24. Find the sum:</p> <p style="text-align: center;">$2681 + 2083 + 539$</p> <p>= _____</p>
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<p>25. Find the sum: $8.92 + 12.894$</p> <p>= _____</p>	<p>26. Find the sum: $0.8 + 8.4 + 11.2$</p> <p>= _____</p>
<p>27. Find the sum: $(26.9 + 8.3) + 5.7$</p> <p>= _____</p>	<p>28. Find the difference: $6264 - 397$</p> <p>= _____</p>
<p>29. Find the difference: $7355 - 3070$</p> <p>= _____</p>	<p>30. Find the difference: $6.043 - 4.496$</p> <p>= _____</p>
<p>31. Sam ordered a wallet for \$21.52, a sweater for \$35.07, and a watch for \$97.29 from a mail-order catalog. He added \$20.24 for tax, shipping, and handling. What was the total cost of Sam's order?</p> <p>= _____</p>	<p>32. One of the events at the circus was Gabriella the Human Cannonball. On Saturday she did four shows. Her distances measured 7.09 meters, 18.87 meters, 18.37 meters, and 19.93 meters. What was the total distance Gabriella flew that day?</p> <p>= _____</p>
<p>33. Manny has \$59.58 in his savings account. He takes out \$31.27. How much money does he have left in the account?</p> <p>= _____</p>	<p>34. Find the value of the expression: $91.09 - 91.09 + 53.2$</p> <p>= _____</p>
<p>35. Jetta had \$135.35 in her account at the beginning of the month. During the month, she wrote checks for \$97.82, \$108.30, and \$70. She also withdrew \$45 at an ATM machine and deposited \$100 from her paycheck three times. How much was in her account at the beginning of the month?</p> <p>= _____</p>	<p>36. Pork chops cost \$2.50 a pound at the market. Mary buys 5.3 pounds. Find the cost.</p> <p>Cost = _____</p>

<p>37. Find the product: $0.4(0.007)$</p> <p>= _____</p>	<p>38. Find the product: $246 \cdot 5$</p> <p>= _____</p>
<p>39. Find the product: $5.2 \cdot 6.1$</p> <p>= _____</p>	<p>40. Divide: $6.6 \div 2$</p> <p>= _____</p>
<p>41. Divide: $9.9 \div 0.1$</p> <p>= _____</p>	<p>42. Divide: $37,788 \div 47$</p> <p>= _____</p>
<p>43. There are 180 pages in the book. If you read 20 pages a day, how long will it take you to read the book?</p> <p>_____</p>	<p>44. Evaluate: $9.687 + 8.295$</p> <p>= _____</p>
<p>45. Evaluate: $1.943 - 0.76$</p> <p>= _____</p>	<p>46. Divide 44.45 by 3.5</p> <p>= _____</p>
<p>47. Evaluate: $\frac{4}{0}$</p> <p>= _____</p>	<p>48. Evaluate: $\frac{0}{3}$</p> <p>= _____</p>

UNIT 3: EXPRESSIONS

<p>49. Find the solution of the equation from the given numbers. $x + 8 = 6$: 12, 21, 14 or - 2</p> <p>a) -2 b) 14 c) 12 d) 21</p> <p>_____</p>	<p>50. State whether the equation is <i>true</i>, <i>false</i>, or an <i>open sentence</i> $12m \cdot 8 = 96$</p> <p>a) true b) false c) open sentence</p> <p>_____</p>
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<p>51. State whether the equation is <i>true, false, or an open sentence</i></p> $12 \cdot 6 = 72$ <p>a) open sentence b) false c) true _____</p>	<p>52. State whether the equation is <i>true, false, or an open sentence</i></p> $12 = 9 + 5$ <p>a) open sentence b) false c) true _____</p>
<p>53. Is the given number a solution to the equation?</p> $18 - q = 12; \quad 4$ <p>a) no b) yes _____</p>	<p>54. Is the given number a solution to the equation?</p> $b = 2b - 10; \quad 10$ <p>a) no b) yes _____</p>
<p>55. Is the given number a solution of the equation?</p> $6a = a + 25; \quad 3$ <p>a) yes b)no _____</p>	<p>56. Solve the equation mentally:</p> $\frac{k}{4} = 3$ <p>a)-1 b)$\frac{3}{4}$ c)$\frac{4}{3}$ d)12 _____</p>
<p>57. Write a numerical expression for the verbal phrase:</p> <p>the quotient of twenty-one and seven</p> <p>a) $7 \div 21$ b) $7 - 21$ c) $21 - 7$ d) $21 \div 7$ _____</p>	<p>58. Write an equation. Is the given value a solution?</p> <p>A farmer sees 56 of his cows out of the barn. He knows that he has 83 cows altogether. Let c represent the number of cows still in the barn. Are there 33 cows still in the barn?</p> <p>a) $56 + 83 = c$; no b) $56 + c = 83$; no c) $83 + c = 56$; no d) $c + 33 = 56$; yes _____</p>
<p>59. Solve the equation:</p> $g + 7 = 9$ <p>a)-2 b)16 c)2 d)63 _____</p>	<p>60. Solve the equation:</p> $9x = 54$ <p>a)45 b)63 c)6 d)486 _____</p>
<p>61. Use the order of operations to simplify each of the following expressions.</p> <p>a) $5 - 10 \cdot 2 =$ _____ b) $22 + 24 \div (10 \div 5) - 13 =$ _____ c) $(5+3) \div 2 + 2 =$ _____ d) $3 \cdot (7 + 6) + 5 =$ _____ e) $[3 \cdot (10 - 7)] + 10 =$ _____ f) $12^2 - (4 + 9^2) - 13 =$ _____</p>	
<p>62. Evaluate each algebraic expression for the given value(s) of the variable(s).</p> <p>a) $4m - 4$, for $m = 8$ _____ b) $54 + 10w$, for $w = 7$ _____ c) $y - x$ if $y = 4$ and $x = 3$ _____ d) $d \div 4$, for $d = 16$ _____ e) $\frac{nz}{n+z}$, for $n = 10$ and $z = 6$ _____</p>	

63. The cost of a school banquet is $\$50 + 25n$, where n is the number of people attending. What is the cost for 87 people?	64. An apartment costs \$450 a month to rent, plus a \$500 security deposit. Write an expression for the cost of renting for m months.
65. A cellular phone company charges \$32 a month plus a \$25 activation fee. a. Write an expression for the total cost for m months of service. = _____ b. Evaluate your expression for 7 months. = _____	66. Your job pays \$5 per hour. a) Write a variable expression for your pay in dollars for working h hours. = _____ b) What is your pay if you work 40 hours? = _____

UNIT 4: PROPERTIES

67. Name the property shown. $5 + 0 = 5$ a) Identity Property of Multiplication b) Associative Property of Multiplication c) Commutative Property of Multiplication d) Identity Property of Addition _____	68. Name the property shown. $5 \cdot 7 = 7 \cdot 5$ a) Identity Property of Multiplication b) Associative Property of Multiplication c) Commutative Property of Multiplication d) Identity Property of Addition _____
69. Name the property shown. $(8 \cdot 5) \cdot 11 = 8 \cdot (5 \cdot 11)$ a) Commutative Property of Multiplication b) Commutative Property of Addition c) Identity Property of Multiplication d) Associative Property of Multiplication _____	70. Name the property shown. $11 \cdot 15 = 15 \cdot 11$ a) Commutative Property of Multiplication b) Associative Property of Multiplication c) Multiplicative Property of Zero d) Multiplicative Identity _____
71. Name the property shown. $30 \cdot 0 \cdot 17 = 0$ a) Commutative Property of Multiplication b) Associative Property of Multiplication c) Multiplicative Property of Zero d) Multiplicative Identity _____	72. Name the property shown. $45 \cdot 1 = 45$ a) Commutative Property of Multiplication b) Associative Property of Multiplication c) Multiplicative Property of Zero d) Multiplicative Identity _____
73. Name the property shown. $24 + 5 = 5 + 24$ a) Commutative Property of Addition b) Associative Property of Addition c) Substitution Property of Equality d) Additive Property _____	74. Name the property shown. $31 + (4 + 17) = (31 + 4) + 17$ a) Commutative Property of Addition b) Associative Property of Addition c) Substitution Property of Equality d) Additive Property _____

<p>75. Use the Distributive Property to multiply. Show your work!</p> $5(b + 8)$ <p>= _____</p>	<p>76. Use the Distributive Property to multiply. Show your work!</p> $5(2t - 5)$ <p>= _____</p>
<p>77. What is the multiplicative inverse of $\frac{8}{19}$?</p> <p>= _____</p>	<p>78. What is the additive inverse of 7?</p> <p>= _____</p>
<p>79. What is the multiplicative inverse of 5?</p> <p>= _____</p>	<p>80. Simplify the expression below. Show your work!</p> $5x - 2x - 7$ <p>= _____</p>

UNIT 5: NUMBER THEORY

<p>81. Find the GCF of 143, & 69</p> <p>GCF = _____</p>	<p>82. Find the GCF of 75, 26, & 208</p> <p>GCF = _____</p>
<p>83. Write the fraction in simplest form:</p> $\frac{18}{26}$ <p>= _____</p>	<p>84. Write the fraction in simplest form:</p> $\frac{162}{270}$ <p>= _____</p>
<p>85. Write $5\frac{2}{3}$ as an improper fraction.</p> <p>_____</p>	<p>86. Sarah is making her own Halloween costume. The costume requires $1\frac{1}{8}$ yards of materials. Write the number of yards needed for Sarah's Halloween costume as an improper fraction.</p> <p>_____</p>
<p>87. Write the improper fraction as a mixed number in simplest form.</p> $\frac{63}{8}$ <p>= _____</p>	<p>88. Write the improper fraction as a mixed number in simplest form.</p> $\frac{81}{6}$ <p>= _____</p>

<p>89. Find the LCM of 3, 11, 15.</p> <p>LCM = _____</p>	<p>90. Find the LCM of 5, 20.</p> <p>LCM = _____</p>
<p>91. A video game has three villains who appear on screen at different intervals. One villain appears every 4 seconds, a second villain appears every 8 seconds, and a third villain appears every 20 seconds. How much time passes between occasions when all three villains appear at the same time?</p> <p>= _____</p>	<p>92. Compare the pair of numbers. Use <, =, or >.</p> <p>a) $\frac{3}{4}$ _____ $\frac{11}{60}$</p> <p>b) $3\frac{13}{42}$ _____ $3\frac{1}{3}$</p> <p>c) $\frac{6}{7}$ _____ $\frac{12}{14}$</p>
<p>93. Order the numbers from least to greatest.</p> <p>a) $\frac{1}{3}, \frac{17}{24}, \frac{1}{2}$ _____</p> <p>b) $3\frac{4}{5}, 3\frac{9}{40}, 3\frac{3}{4}$ _____</p>	<p>94. Find the prime factorization of the number.</p> <p>a) 336 _____</p> <p>b) 2160 _____</p>
<p>95. Convert the mixed number to an improper fraction: $3\frac{1}{4}$</p> <p>_____</p>	<p>96. Simplify $\frac{10}{25}$</p> <p>_____</p>

UNIT 6: FRACTION OPERATIONS

<p>97. Find each sum. Write in simplest form.</p> <p>a) $\frac{3}{7} + \frac{2}{7} =$ _____</p> <p>e) $\frac{6}{14} + \frac{7}{14} + \frac{2}{14} =$ _____</p> <p>i) $3\frac{2}{7} + 2\frac{3}{14} + 4\frac{3}{7} =$ _____</p>				<p>b) $\frac{9}{17} + \frac{15}{17} =$ _____</p> <p>f) $\frac{1}{8} + \frac{1}{12} =$ _____</p> <p>j) $\frac{1}{4} + \frac{3}{8} =$ _____</p>				<p>c) $\frac{4}{9} + \frac{8}{9} =$ _____</p> <p>g) $6\frac{1}{4} + 7\frac{2}{3} =$ _____</p> <p>k) $2\frac{1}{4} + 3\frac{4}{5} + 5 =$ _____</p>				<p>d) $\frac{1}{2} + \frac{3}{8} =$ _____</p> <p>h) $2\frac{1}{10} + 4\frac{3}{5} =$ _____</p> <p>l) $\frac{1}{6} + \frac{2}{5} + \frac{7}{30} =$ _____</p>			
<p>98. Find each difference. Write in simplest form.</p> <p>a) $\frac{9}{14} - \frac{5}{14} =$ _____</p> <p>e) $7\frac{1}{2} - 6\frac{3}{10} =$ _____</p> <p>i) $17\frac{5}{17} - 7\frac{6}{17} =$ _____</p>				<p>b) $\frac{3}{8} - \frac{1}{4} =$ _____</p> <p>f) $5\frac{3}{5} - 2\frac{1}{4} =$ _____</p> <p>j) $\frac{5}{6} - \frac{3}{9} =$ _____</p>				<p>c) $\frac{5}{6} - \frac{3}{5} =$ _____</p> <p>g) $9\frac{5}{12} - 4\frac{2}{3} =$ _____</p> <p>k) $4\frac{1}{6} - 1\frac{1}{3} =$ _____</p>				<p>d) $\frac{17}{18} - \frac{11}{18} =$ _____</p> <p>h) $8 - 2\frac{1}{3} =$ _____</p>			

99. Find each product. Write in simplest form.

a) $\frac{1}{2} \cdot \frac{3}{5} =$ _____

b) $\frac{4}{5} \cdot \frac{5}{8} =$ _____

c) $\frac{7}{9} \cdot \frac{11}{20} =$ _____

d) $\frac{1}{5} \cdot \frac{7}{9} =$ _____

e) $\frac{4}{9} \cdot 27 =$ _____

f) $\frac{1}{3} \cdot 3 =$ _____

g) $8\frac{2}{5} \cdot 5\frac{1}{2} =$ _____

h) $\frac{2}{3} \cdot \frac{3}{5} =$ _____

i) $1\frac{5}{7} \cdot 10\frac{1}{2} =$ _____

j) $2\frac{4}{9} \cdot (-3\frac{6}{11}) =$ _____

i) $18 \cdot \frac{2}{9} =$ _____

j) $7\frac{1}{2} \cdot (2\frac{2}{3}) =$ _____

100. Find each quotient. Write in simplest form.

a) $45 \div \frac{5}{14} =$ _____

b) $\frac{7}{9} \div \frac{2}{3} =$ _____

c) $\frac{5}{6} \div \frac{6}{7} =$ _____

d) $\frac{5}{28} \div \frac{1}{7} =$ _____

e) $19\frac{1}{2} \div 2\frac{3}{5} =$ _____

f) $2\frac{1}{4} \div 3 =$ _____

g) $\frac{18}{21} \div 3 =$ _____

h) $\frac{7}{8} \div \frac{7}{12} =$ _____

101. Evaluate each algebraic expression for the given value(s) of the variable(s).

a) $\frac{4}{5}x$ for $x = \frac{5}{6}$ _____

b) $y \div 1\frac{3}{4}$ for $y = 5\frac{5}{6}$ _____

c) $x \div 70$ for $x = \frac{7}{8}$ _____

102. Compare using $<$, $=$, or $>$:

$12\frac{7}{15} + 6\frac{2}{5}$ _____ 19

103. Find the reciprocal of $\frac{7}{11}$

Name _____ Date _____

2023 Summer IXL Math Assignment: For Rising 7th Grade Students (REVISED)

This summer, rising 7th grade students should do **15 minutes of IXL practice each week**. The topics/skills listed in the chart below will now be found under the title **“Level H”**. You are to select as many of these topics as possible and practice them. Remember, the purpose of this assignment is to keep these skills fresh, so that you will be ready for Pre-Algebra in the fall.

Keep track of which topics/skills you practice each week, and for how long you practice each one. Enter the information each week on the chart found on the next page carefully. **At the end of the week, your parent/guardian should initial to indicate the “Total Minutes” for the week is correct. I will also be checking over the summer to see who is – AND IS NOT – working on the assignment!**

Skill ↓	Week of →	6/19	6/26	7/3	7/10	7/17	7/24	7/31	8/7	8/14	8/21	8/28
D. Exponents: 1, 2, 3, 4												
E. Mixed Operations – Whole Numbers: 1, 6, 7												
F. Number Theory: 1, 2, 3, 4, 5, 6, 7, 8, 9												
G. Fractions & Decimals: 1, 2, 3												
H. Add & Subtract Decimals: 1, 3, 6												
I. Multiply & Divide Decimals: 2, 3, 5, 7, 9												
J: Mixed Operations - Decimals: 1, 3												
K: Add & Subtract Fractions: 1, 3, 6, 9												
L. Multiply Fractions: 1, 2, 6, 9, 10, 12, 13, 15												
M. Divide Fractions: 2, 3, 5, 7, 10												
N. Mixed Operations – Fractions: 1, 3												
Total Minutes for the Week:												
Parent/Guardian Initials:												

Total minutes for the summer: _____

YOU MUST LOG IN WITH YOUR PERSONAL IXL PASSWORD! NO “GUEST” LOGINS!!! THIS IS THE ONLY WAY YOU WILL GET CREDIT FOR YOUR TIME AND EFFORT!!!

IF YOU HAVE TROUBLE AT ANY TIME, SEND AN EMAIL TO MR. MILLER – REMEMBER IT MUST BE SENT FROM YOUR SCHOOL EMAIL ADDRESS!!!