Fellowship Christian School Summer Math Packet

Math 6

Summer Assignment

For students needing help with this packet, please use the link to the online textbook below to access interactive tutorials for help and/or additional practice.
Login information to access online textbook, tutorial videos, online practice, and additional resources:

1. http://my.hrw.com
2. Type in Username: **fcsmath62008**
3. Type in Password: **paladins**
4. Click "Go to the Online Textbook"
5. Select "Textbook Introduction" and "Table of Contents." Click "GO."
6. Select page number of desired topic and click "GO."

Name:_____

This packet should be completed over the summer and will be due on the first day of school. This assignment will be graded on completion as well as accuracy. You MUST show your <u>work</u> on <u>separate paper to be turned in</u>. Show all work neatly, with problems numbered and in order. If you do not show your work points will be deducted from your grade. Please put your final answers in the space provided. DO *NOT* USE A CALCULATOR.

____ 1. The attendance at a rock music concert was 12,796 people. The attendance at a country music concert was 12,842 people. Which music concert had the higher attendance?
a. country music concert b. rock music concert

____ 2. The Web site of an online shopping company had 96,764,210 visits on a particular day. The Web site of a search engine had 96,795,934 visits on the same day. Which Web site had more visits?
a. online shopping company Web site b. search engine Web site

____ 3. The attendance at a parade was 67,205 people. The attendance at a political rally was 67,532 people. Which event had the higher attendance?
a. rally b. parade

____ 4. Order the numbers 1,505; 1,032; 1,857 from least to greatest.
a. 1,505; 1,032; 1,857
b. 1,857; 1,505; 1,032
c. 1,032; 1,505; 1,857

____ 5. The three tallest trees in a forest are oak at 20,774 mm, redwood at 56,580 mm, and cypress at 38,993 mm. Write the trees in order from smallest height to largest height.
a. cypress, oak, redwood c. oak, cypress, redwood
b. oak, redwood, cypress d. redwood, cypress, oak

____ 6. Estimate the sum by rounding to the thousands place.

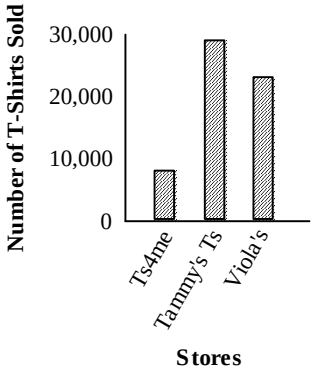
$$\begin{array}{r} 7{,}307 \\ +\ \underline{4{,}841} \end{array}$$

a. 12,000 c. 2,000
b. 12,100 d. 11,000

____ 7. Each student in the seventh grade will be required to write three papers that are a total of 13 pages long. If there are 47 students in the seventh grade, approximately how many sheets of paper will the seventh grade need to complete these assignments?
a. 60 sheets of paper c. 917 sheets of paper
b. 500 sheets of paper d. 5 sheets of paper

____ 8. Sonia buys a photograph album. Each page in the album holds 20 pictures. If Sonia has 319 pictures to put in the album, approximately how many pages will she need?
a. 14 pages c. 6,400 pages
b. 16 pages d. 19 pages

____ 9. Estimate the average number of T-shirts sold.



a. 20,000 T-shirts
b. 15,000 T-shirts
c. 25,000 T-shirts
d. 10,000 T-shirts

____ 10. Write the expression $7 \times 7 \times 7 \times 7 \times 7$ in exponential form.
a. 7^4
b. 16,807
c. 5^7
d. 7^5

____ 11. Find the value of 3^5.
a. 125
b. 25
c. 243
d. 81

____ 12. Evaluate the expression $25 + 24 \div 4$.
a. 31
b. 47
c. 16
d. 12

____ 13. Evaluate the expression $63 \div (1 + 8) \bullet 2^3 - 5$.
a. 7
b. 37
c. 51
d. 21

____ 14. Sally bought 4 boxes of pens for $6 each and 7 packages of paper for $7 each. Evaluate $4 \times 6 + 7 \times 7$ to find the amount Sally spent on pens and paper.
a. $364
b. $140
c. $73
d. $49

____ 15. Evaluate 35 + 31 + 55 + 29.
a. 160
b. 90
c. 150
d. 75

____ 16. Evaluate $2 \bullet 7 \bullet 10$.
a. 280
b. 70
c. 20
d. 140

____ 17. Identify a pattern in the arithmetic sequence. Name the next three terms.
7, 26, 45, 64, 83, 102, 121, ...
a. 142, 161, 180
b. 140, 159, 180
c. 140, 159, 178
d. 142, 161, 178

____ 18. Identify a pattern in the sequence 6, 60, 12, 120, 24, 240, 48, ... Name the next three terms.
a. 10, 96, 19
b. 43, 53, 48
c. 5, 24, 2
d. 480, 96, 960

____ 19. A comic book costs $2. How much is the total cost of 2, 3, 4, or 5 comic books?
a. $4, $6, $8, $10
b. $3, $4, $6, $8
c. $6, $8, $10, $5
d. $4, $5, $6, $7

____ 20. Isabel wrote 11 letters to friends each month for x months in a row. Write an expression to show the total number of letters Isabel wrote.

a. $\frac{11}{x}$
b. $11x$
c. $11 + x$
d. $11 - x$

____ 21. Write the phrase "13 added to z" as a numerical or algebraic expression.

a. $13 \div z$
b. $z + 13$
c. $z \bullet 13$
d. $13 - z$

____ 22. Write the phrase "z divided by 2" as a numerical or algebraic expression.

a. $z \bullet 2$
b. $2 \div z$
c. $z \div 2$
d. $2 - z$

____ 23. Solve the equation $m + 10 = 53$. Check your answer.

a. $m = 43$
b. $m = 53$
c. $m = 63$
d. $m = 44$

____ 24. Solve the equation $s - 7 = 54$. Check your answer.

a. $s = 48$
b. $s = 57$
c. $s = 47$
d. $s = 61$

____ 25. Solve the equation $10m = 200$. Check your answer.

a. $m = 210$
b. $m = 190$
c. $m = 20$
d. $m = 21$

____ 26. Solve the equation. Check your answer.

$\frac{n}{5} = 43$

a. $n = 38$
b. $n = 8\frac{3}{5}$
c. $n = 215$
d. $n = 48$

____ 27. Write the decimal 8.823 in expanded form.

a. 8 + 0.8 + 0.2 + 0.3
b. 8 + 8 + 2 + 3
c. 8 + 0.8 + 0.02 + 0.003
d. 8 + 0.08 + 0.002 + 0.0003

____ 28. Write 2 + 0.3 + 0.01 + 0.002 in standard form.

a. 2.3102
b. 2.0312
c. 2.312
d. 20.312

____ 29. Write the decimal 3.9 in words.

a. nine tenths
b. three and nine tenths
c. three and nine hundredths
d. nine hundredths

____ 30. One beetle is 0.07 inch long, and another is 0.53 inch. Which length is greater?

a. 0.53 inch
b. 0.07 inch

____ 31. Order the decimals 3.868, 3.278, 3.896 from least to greatest.

a. 3.868, 3.278, 3.896
b. 3.278, 3.868, 3.896
c. 3.896, 3.278, 3.868
d. 3.278, 3.896, 3.868

____ 32. Order the decimals 41.144, 4.1014, 413.929, 40.693 from greatest to least.

a. 41.144, 4.1014, 413.929, 40.693
b. 413.929, 41.144, 40.693, 4.1014
c. 4.1014, 40.693, 41.144, 413.929
d. 413.929, 40.693, 41.144, 4.1014

____ 33. Estimate 5.209 + 2.667 by rounding to the nearest whole number.

a. 13
b. 8
c. 5
d. 7

____ 34. Four bags of potatoes weigh 3.35 pounds, 4.894 pounds, 5.6 pounds, and 4.95 pounds. What is the total weight of the bags?

a. 187.94 pounds
b. 18.794 pounds
c. 1.8794 pounds
d. 20.62 pounds

____ 35. Find the product $680.6 \times 1,000$.

a. 6,806
b. 68,060
c. 680,600
d. 6,806,000

____ 36. Write the number 2,068 in scientific notation (powers of 10).

a. 0.2068×10^4
b. 20.68×10^2
c. 2.068×10^3
d. 2.068×10^1

____ 37. Write the number 2.413×10^6 in standard form.

a. 24,130
b. 241,300,000
c. 2,413,000
d. 24,130,000

____ 38. If 3 boxes weigh 0.53 pound each, what is the total weight?

a. 5.66 pounds
b. 3.53 pounds
c. 1.59 pounds
d. 15.9 pounds

____ 39. If 7 apples cost $0.11 each, what is the total cost?

a. $7.70
b. $0.77
c. $0.02
d. $7.11

____ 40. Find the product.

4.51×3.4

a. 153.34
b. 1.5334
c. 7.91
d. 15.334

____ 41. Find the quotient.

$3.9 \div 3$

a. 0.9
b. 13
c. 0.13
d. 1.3

____ 42. If 3 friends share a bag of pretzels that costs $4.08, how much should each person pay?

a. $1.36
b. $1.08
c. $13.60
d. $0.14

____ 43. Mr. and Mrs. Wodehouse's 5 children are buying a cake for their parents' wedding anniversary. The cake costs $24.10. If the children split the cost equally, how much will each person pay?

a. $48.20
b. $4.82
c. $0.48
d. $19.10

____ 44. Find the quotient.

$4.14 \div 4.5$

a. 0.92
b. 9.2
c. 0.092
d. 1.08695652174

____ 45. Suppose a trip is 360.8 miles long and you want to spend 2 days driving. How many miles should you drive each day?

a. 180 miles
b. 180.84 miles
c. 181 miles
d. 180.4 miles

____ 46. Tell whether 870 is divisible by 2, 3, 4, 5, 6, 9, and 10.

a. divisible by 2, 6, 9, and 10
b. divisible by 2, 3, 5, 6, and 10
c. divisible by 4 and 9
d. divisible by 3, 4, and 5

____ 47. Tell whether the number 13 is prime or composite.

a. Composite
b. Prime

____ 48. List all of the factors of 15.

a. 1, 3, 5, 15
b. 1, 2, 3, 15
c. 1, 15
d. 3, 5

____ 49. List all of the factors of 47.

a. 1, 2, 23, 47
b. 1, 47
c. 1, 2, 3, 15, 23, 47
d. 1, 3, 15, 47

____ 50. Write the prime factorization of 54.

a. $2 \bullet 3 \bullet 3 \bullet 3$
b. $2 \bullet 2 \bullet 3 \bullet 4$
c. $2 \bullet 2 \bullet 3 \bullet 5$
d. $1 \bullet 2 \bullet 3 \bullet 9$

____ 51. It takes 120 drops of water to fill a teaspoon. Write the prime factorization of 120 using exponents.

a. $2^2 \bullet 3 \bullet 5$
b. $2 \bullet 3 \bullet 5$
c. $2^3 \bullet 3 \bullet 5$
d. $2^3 \bullet 15$

____ 52. Find the GCF of 63, 72, and 24.

a. 2
b. 6
c. 4
d. 3

____ 53. Write the decimal 1.23 as a fraction or mixed number.

a. $\frac{1}{23}$
b. $1\frac{1}{5}$
c. $1\frac{23}{100}$
d. $\frac{23}{100}$

____ 54. Order the fraction and decimals from least to greatest.

0.78, 0.5, $\frac{3}{5}$

a. $\frac{3}{5}$, 0.5, 0.78
b. 0.5, $\frac{3}{5}$, 0.78
c. 0.78, $\frac{3}{5}$, 0.5
d. 0.5, 0.78, $\frac{3}{5}$

____ 55. Find two equivalent fractions for $\frac{6}{16}$.

a. $\frac{6}{8}$ and $\frac{12}{32}$
b. $\frac{8}{3}$ and $\frac{32}{12}$
c. $\frac{3}{8}$ and $\frac{18}{32}$
d. $\frac{3}{8}$ and $\frac{12}{32}$

____ 56. Write the fraction $\frac{36}{42}$ in simplest form.

a. $\frac{7}{7}$
b. $\frac{42}{49}$
c. $\frac{6}{7}$
d. $\frac{6}{8}$

____ 57. Write $5\frac{2}{5}$ as an improper fraction.

a. $\frac{52}{5}$
b. $\frac{27}{5}$
c. $\frac{12}{5}$
d. $\frac{7}{5}$

____ 58. Subtract. Express your answer in simplest form.

$2\frac{5}{11} - 1\frac{3}{11}$

a. $1\frac{2}{11}$
b. $1\frac{5}{22}$
c. $3\frac{8}{11}$
d. $\frac{13}{22}$

____ 59. Find the least common multiple (LCM) of 8 and 10.

a. 24
b. 42
c. 40
d. 30

____ 60. Find the least common multiple (LCM) of 3, 5, and 10.

a. 51
b. 9
c. 10
d. 30

____ 61. Subtract. Express your answer in simplest form.

$\frac{3}{4} - \frac{2}{7}$

a. $\frac{12}{29}$
b. $\frac{1}{2}$
c. $\frac{13}{29}$
d. $\frac{13}{28}$

____ 62. Add. Express your answer in simplest form.

$2\frac{1}{2} + 1\frac{1}{8}$

a. $3\frac{13}{15}$
b. $3\frac{5}{8}$
c. $3\frac{1}{5}$
d. $3\frac{11}{16}$

____ 63. Subtract. Express your answer in simplest form.

$7\frac{2}{5} - 2\frac{3}{5}$

a. $4\frac{1}{5}$
b. $5\frac{4}{5}$
c. $5\frac{1}{5}$
d. $4\frac{4}{5}$

____ 64. Multiply. Express your answer as a mixed number in simplest form.

$6 \bullet \frac{7}{8}$

a. $\frac{7}{48}$
b. $\frac{42}{8}$
c. $5\frac{1}{4}$
d. $\frac{42}{48}$

____ 65. Multiply. Express your answer in simplest form.

$\frac{4}{9} \bullet \frac{1}{3}$

a. $\frac{4}{27}$
b. $\frac{41}{93}$
c. $\frac{7}{9}$
d. $\frac{4}{3}$

____ 66. Find the reciprocal of $\frac{2}{9}$.

a. 4
b. $\frac{9}{2}$
c. $\frac{7}{2}$
d. 5

____ 67. Find the mean (average) of the data set 18, 36, 24, 36, 30, and 36.

a. 26
b. 27
c. 36
d. 30

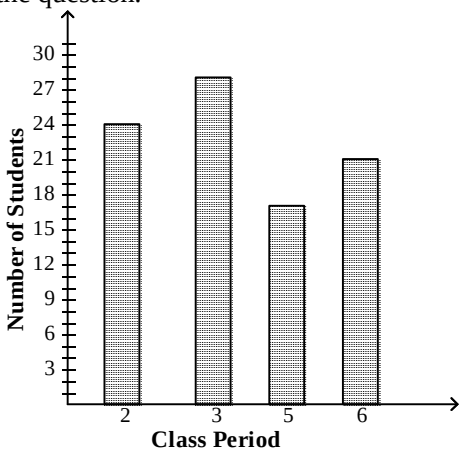
____ 68. Find the mean, median, mode, and range of the data set. (See last page for definitions.)

Number of Books Read			
Sylvester	218	Edmund	224
Rashin	217	Treya	217

a. The mean is 217.5 books; the median is 219 books; the mode is 217 books; and the range is 7 books.
b. The mean is 219 books; the median is 217 books; the mode is 217.5 books; and the range is 7 books.

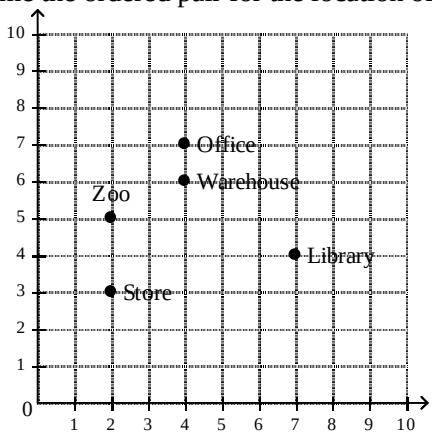
c. The mean is 219 books; the median is 217.5 books; the mode is 217 books; and the range is 7 books.
d. The mean is 219 books; the median is 217.5 books; the mode is 7 books; and the range is 217 books.

____ 69. Mr. Frederick teaches 4 math classes. Which class period has the most students? Use the bar graph to answer the question.



a. Period 2
b. Period 6
c. Period 3
d. Period 5

____ 70. Name the ordered pair for the location of the warehouse.



a. (7, 4)
b. (6, 4)
c. (2, 3)
d. (4, 6)

____ 71. Use the table to write the ratio of green beans to peas.

Type of Vegetable	Number on Plate
Carrots	1
Peas	13
Peppers	29
Green beans	31

a. 31:74
b. 74:13
c. 31:13
d. 13:31

____ 72. Find the missing value in the proportion $\frac{1}{9} = \frac{n}{63}$.

a. $n = 0$
b. $n = 8$
c. $n = 7$
d. $n = 567$

____ 73. Only a portion of the land on Earth is farmland capable of growing food. In a particular region, 28% of the land is farmland. Express 28% as a fraction in simplest form.

a. $\frac{7}{50}$
b. $\frac{7}{25}$
c. $\frac{25}{7}$
d. 0.28

____ 74. Express 99% as a decimal.

a. 0.99
b. $\frac{99}{100}$
c. 9.9
d. 1.01

____ 75. Write 64% as a decimal and as a fraction in simplest form.

a. 0.64 and $\frac{4}{25}$
b. 0.64 and $\frac{16}{25}$
c. 6.40 and $\frac{16}{25}$
d. 6.40 and $\frac{4}{25}$

____ 76. Express the fraction $\frac{2}{5}$ as a percent.

a. 0.4%
b. 4%
c. 40%
d. 250%

____ 77. Find 85% of 45.

a. 38.25
b. 34.45
c. 52.94
d. 3825

____ 78. After a nice dinner, Lung decides to leave a 20% tip. The total bill comes to $21.05. About how much should he leave for the tip?

a. $0.42
b. $25.25
c. $3.75
d. $4.20

____ 79. Use the order of operations to find the value of the expression. $9 - 8 \div 4 + 2$

a. *23*
b. 19
c. 9
d. 16

____ 80. Use the order of operations to find the value of the expression. $9 + 6 \times (8 - 5)$

a. 21
b. 45
c. 27
d. 83

____ 81. Use the order of operations to find the value of the expression. $20 - 3 + 2^3$

a. 15
b. 13
c. 9
d. 25

____ 82. Find the quotient. $5.14 \div 2$

a. 2.57
b. 2.75
c. 25.7
d. 2.57

____ 83. Find the quotient. 171.6 ÷ 22

a. 8.7
b. 9.7
c. 7.8
d. 7.9

____ 84. Find the quotient. 38.7 ÷ 9

a. 4.70
b. 4.3
c. .043
d. .43

____ 85. Determine whether the statement is always, sometimes, or never true.

Intersecting lines are parallel.

a. always
b. sometimes
c. never

____ 86. Estimate the weight of a pencil.

a. 20 lb
b. 1 lb
c. 50 lb
d. 2 oz

____ 87. The total mass of 5 identical boxes is 12.95 kg. What is the mass of <u>each</u> box?

a. 25.9 kg
b. 2.95 kg
c. 0.259 kg
d. 2.59 kg

____ 88. Convert 13 days to hours.

a. 780 hours
b. 0.54 hour
c. 18,720 hours
d. 312 hours

____ 89. Convert 4 weeks to days.

a. 120 days
b. 28 days
c. 7 days
d. 240 days

____ 90. The train was scheduled to arrive at 5:25 P.M. It arrived 3 hours and 15 minutes late. Find the time the train arrived.

a. 7:20 P.M.
b. 7:40 P.M.
c. 8:40 P.M.
d. 8:20 P.M.

____ 91. Name a positive or negative number to represent a decrease of 5 points in your history grade.

a. $-\frac{1}{5}$
b. +5
c. –5
d. $+\frac{1}{5}$

____ 92. Name a positive or negative number to represent a rise of 29°F in the temperature.

a. –29
b. +29
c. $+\frac{1}{29}$
d. $-\frac{1}{29}$

____ 93. Order the integers 4, –6, 8, and –4 from least to greatest.

a. 8, 4, –4, –6
b. –4, 8, 4, –6
c. 4, –6, 8, –4
d. –6, –4, 4, 8

____ 94. Find the product $2.5 \bullet 2.5$

a. 5.0
b. 6.25
c. 10.0
d. 7.5

____ 95. Evaluate $10v$ for $v = 8$.

a. 2
b. –90
c. 80
d. –80

____ 96. Find the quotient $40 \div 0.05$

a. 800
b. –800
c. 80
d. 8

____ 97. Solve $g - 6 = 2$. Check your answer.

a. $g = -4$
b. $g = -8$
c. $g = 8$
d. $g = 4$

____ 98. Solve $w + 7 = 18$. Check your answer.

a. $w = -11$
b. $w = -3$
c. $w = 11$
d. $w = 3$

____ 99. Solve $4f = 20$. Check your answer.

a. $f = -5$
b. $f = 16$
c. $f = 24$
d. $f = 5$

____ 100. Solve $\frac{z}{8} = 9$. Check your answer.

a. $z = 1$
b. $z = 72$
c. $z = 17$
d. $z = -72$

<u>Helpful Information:</u>

Mean = average of a set of data values (sum divided by the number of values in the set)

Median = middle value when data values are ordered from least to greatest

Mode = most often repeated value (sometimes there is no mode)

Range = highest value minus lowest value

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Order of Operations: PEMDAS
Parentheses
Exponents
Multiply/Divide (left to right)
Add/Subtract (left to right)