June, 2024

Dear TCA 7th grade students,

This packet is your summer math work for entering the 7th grade. To receive full credit, you must show all of your work on the page. If there is not enough room, you can use a separate piece of paper and include it with your work. All work should be done in pencil and be neat enough to read. Be sure that you read the directions before starting the problems.

If you have trouble working on the problems, you can look at online resources or ask a parent or friend for help. Some good online resources are: mathisfun.com, khanacademy.com, and purplemath.com.

This work should be spread out over the summer. This math packet is due the first day of school. It will count as a quiz grade.

Have a great summer!

Ms. Coughlin

1. Compare the decimals using: <, >, or = 5.839 15.827 63.74 63.074 3.75 3.77 0.52 0.520	2. Write the decimals in order from least to greatest. 6.74, 5.82, 6.95, 4.9, 5.8
3. Round to the ten thousands place. 7,365,915 Round to the tens place. 68,282	4. Round to the tenths place. 727.34 Round to the thousandths place 4.8295
5. 25 + 6.23	6. 8.615 + 12.4
7. 4.182 + 27.4 + 9.017	8. 9.56 – 2.7
9. 18.4 – 3.59	10. 71.5 – 4.38

11. Use the trick for multiplying by powers of 10. $2.54 \bullet 10 =$ $2.54 \bullet 100 =$ $2.54 \bullet 1{,}000 =$	12. Use the trick for multiplying by powers of 10. $87 \bullet 10 =$ $87 \bullet 100 =$ $87 \bullet 1{,}000 =$
13. $748 \bullet 67$	14. $3724 \bullet 253$
15. $9.24 \bullet 2.5$	16. $21.64 \bullet 0.38$
17. $0.019 \bullet 0.57$	18. $374.2 \bullet 0.06$
19. Write with an exponent. $8 \bullet 8 \bullet 8 \bullet 8 \bullet 8 \bullet 8$	20. Write in standard form. 3^4

21. Write in scientific notation. 34,700,000	22. Write in standard form. 2.91×10^5
23. $3\overline{)\ 7.71}$	24. $50\overline{)\ 1.821}$
25. $0.2\overline{)\ 56.74}$	26. $0.04\overline{)\ 12}$
27. $11\overline{)\ 41.9}$	28. $0.6\overline{)\ 8.17}$

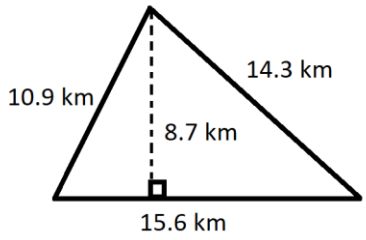
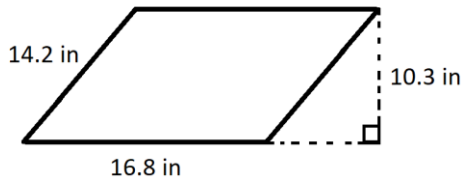
29. Use order of operations to solve. $5+2(7+2^4)$	30. Use order of operations to solve. $20 - 18 \div 3^2$
31. Solve for x. $x + 11 = 17$	32. Solve for x. $x - 5 = 3$
33. Solve for x. $11x = 88$	34. Solve for x. $\frac{x}{4} = 6$
35. $3x - 4 = 14$	36. $10 + \frac{x}{3} = 30$

37. Write the following integers in order from least to greatest. $-4,\ 0,\ -7,\ 12,\ 2,\ -2$	38. Evaluate the following expressions. $-5 + 2$ $-10 + (-12)$ $30 + (-3)$
39. Evaluate the following expressions. $-2 - 6$ $7 - (-4)$ $-12 - (-6)$	40. Evaluate the following expressions. $10 \bullet -4$ $-6 \bullet -8$
41. Evaluate the following expressions. $-36 \div -6$ $70 \div -2$	42. Solve for x. $-4x + 3 = -1$
43. $\frac{x}{5} - (-4) = 12$	44. List all of the factors of 24.

45. Find the prime factorization of 90 using a factor tree.	46. Find the greatest common factor of 60 and 75.
47. List the first ten multiples of 9.	48. Find the least common multiple of 9 and 24.
49. Write the fractions in simplest form. $\frac{8}{24}$	50. Write the fraction in simplest form. $\frac{30}{36}$

51. $\frac{8}{13} + \frac{2}{13}$	52. $\frac{2}{9} + \frac{1}{6}$
53. Write answer as a mixed number in simplest form. $6\frac{4}{5} + \frac{3}{5}$	54. Write answer as a mixed number in simplest form. $2\frac{3}{8} + 11\frac{5}{24}$
55. $\frac{12}{31} - \frac{7}{31}$	56. $\frac{30}{45} - \frac{1}{5}$
57. Write answer as a mixed number in simplest form. $5\frac{2}{7} - \frac{6}{7}$	58. Write answer as a mixed number in simplest form. $8\frac{3}{4} - 2\frac{2}{3}$

59. $\frac{3}{8} \bullet \frac{5}{6}$	60. $\frac{2}{5} \bullet 4\frac{1}{2}$
61. $\frac{5}{6} \bullet 3$	62. $\frac{4}{7} \div \frac{5}{6}$
63. $2\frac{1}{3} \div \frac{7}{8}$	64. $6 \div \frac{2}{5}$
65. There is a bag of marbles contained: 2 white marbles, 3 orange marbles, 1 blue marble, and 2 red marbles. What is the probability of randomly picking a white marble?	66. Using the same situation as problem 59, after picking one white marble out of the bag, what is the probability of picking an orange marble from the remaining marbles?

67. Find the area for the triangle.  	68. A triangle has a base of 56.7 m and a height of 5m. What is the area of the triangle.
69. A rectangle has a perimeter of 216 feet squared and a length of 59 feet. What is the width?	70. Find the area of the parallelogram. 

71. What is the perimeter of a rectangle with a length of 23m and a height of 34m?	72. Draw and label: an acute angle, right angle, and obtuse angle.
73. A cookie recipe calls for 3 eggs to make 4 trays of cookies. How many trays of cookies can be baked using 12 eggs?	74. 14 batteries cost $4. How many batteries can be bought with $10?
75. Solve the proportion. $\frac{x}{12} = \frac{15}{36}$	76. Solve the proportion. $\frac{2}{17} = \frac{7}{x}$