

Summer Math 2023 Packet: Grade 6 Math

Dear Students and Parents,

This summer, we encourage you to continue to practice your mathematics at home. Practicing math skills over the summer can keep the brain's pathways for computation and mathematical vocabulary strong.

Please make sure to follow the suggested directions for the best outcomes:

1. **Do NOT use a calculator (unless specified).** Take time to "grow your brain" and practice your math facts.
2. **Show all work!** An important aspect of mathematics is being able to communicate the process you use to arrive at your answer. It also provides an opportunity to review your thinking when making corrections to your work.
3. **Be neat and organized!** Part of success in math is being able to organize your work and keep track of your calculations and steps. Use all the paper you need to neatly show your work.
4. **Box your final answers** (another organizational strategy).
5. **Do not rush!** Take advantage of the summer pace and see if you digest more of what you're working on.
6. **If you are stuck on a problem, read the example problems provided at the beginning of each exercise.** If you are still stuck, check out one of the math websites listed below.
7. **Check your work!** If you got an incorrect answer, go back and try to figure out your error. Correcting your work and figuring out where you went wrong is monumental in the learning process.

Resources:

For help with a topic: www.purplemath.com and select 6th grade on the left hand column, then select the topic from the top.

For Math Fact Practice: www.aplusmath.com and select flash cards. You can switch the operation and difficulty each time.

Another resource for help relearning a topic: www.khanacademy.org

Math Learning Games: www.funbrain.com

Another suggestion: If you or your child has a cellular phone, there are free math apps that you can play on and build math skills. There are many out there. Try one out!

Find an equivalent fraction. The first two examples have been completed for you.

1. $\frac{2}{4}$ $\frac{2 \div 2}{4 \div 2} = \frac{1}{2}$	2. $\frac{6}{18}$ $\frac{6 \div 6}{18 \div 6} = \frac{1}{3}$	3. $\frac{4}{16}$
4. $\frac{5}{55}$	5. $\frac{8}{12}$	6. $\frac{9}{21}$
7. $\frac{11}{55}$	8. $\frac{6}{24}$	9. $\frac{9}{63}$
10. $\frac{9}{18}$	11. $\frac{3}{24}$	12. $\frac{19}{19}$

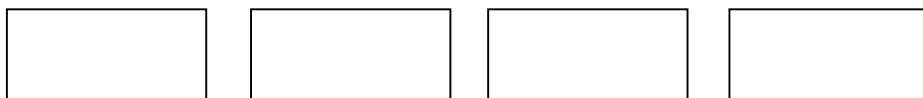
Convert the following decimals to fractions.

13. 0.5 ↓ Tenths place = $\frac{5}{10}$ which is equivalent to $\frac{1}{2}$	14. .80 ↓ Tenths place = $\frac{80}{100}$ which is equivalent to $\frac{8}{10}$ and $\frac{4}{5}$	15. .40
16. .20	17. 0.35	18. 0.1
19. .65	20. 0.3	21. .98
22. .45	23. .04	24. .525
25. .88	26. .325	27. .15

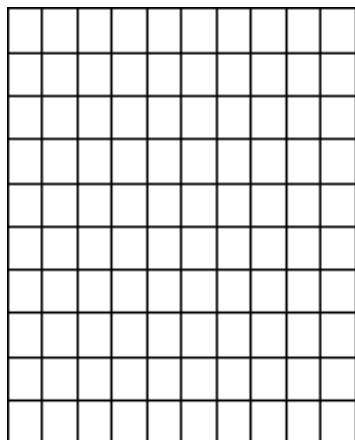
Operations with Fractions and Decimals: Simplify fractions when necessary.

28. $4.961 + 23.4556$	29. $22 - 9.56$	30. $921.32 - 197.83$
31. $12.946 + 8.675$	32. $15.93 - .095$	33. $3.547 + 9$
34. $\frac{1}{3} + \frac{3}{4}$	35. $1\frac{2}{5} + 6\frac{3}{4}$	36. $\frac{5}{6} - \frac{1}{5}$
37. $5\frac{3}{4} - 2\frac{2}{5}$	38. $\frac{1}{6} \times \frac{3}{5}$	39. $\frac{5}{7} \times \frac{7}{9}$
40. $\frac{3}{9} \times 6$	41. $\frac{5}{9} \times \frac{9}{5}$	42. $\frac{2}{3} + \frac{4}{9}$

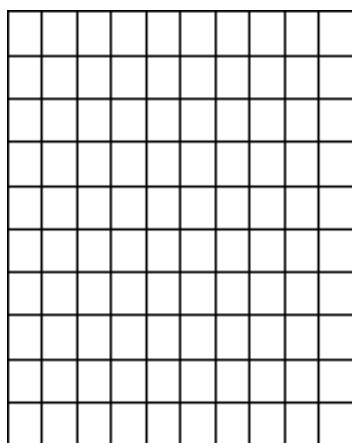
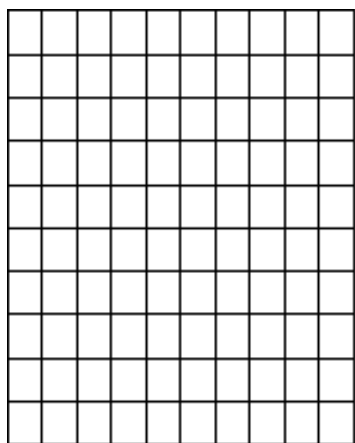
43. Shown below are some Hershey chocolate bars. Shade in $3\frac{3}{5}$ bars.



44. Shade in 0.62 of the grid below.



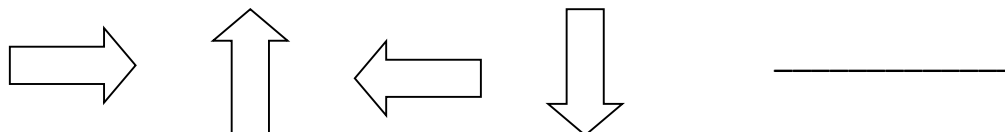
45. Show 1.18 in the grids below.



46. Fill in the blank to complete the patterns below.

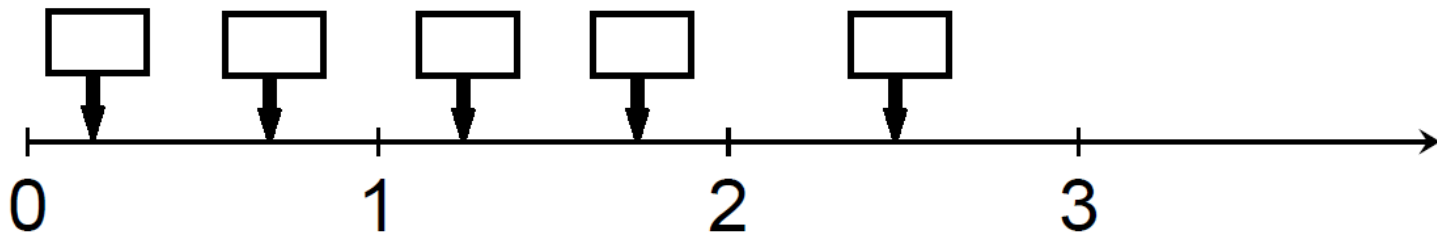
3, 7, 11, 15, 19, _____

47. Draw in the next figure in the pattern.

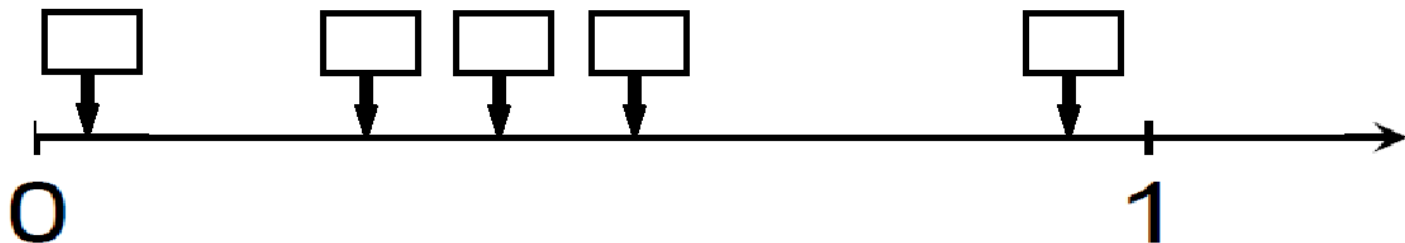


Place the following numbers on the number line.

48. $1\frac{3}{4}$, $\frac{2}{3}$, $1\frac{1}{4}$, 0.2, 2.5

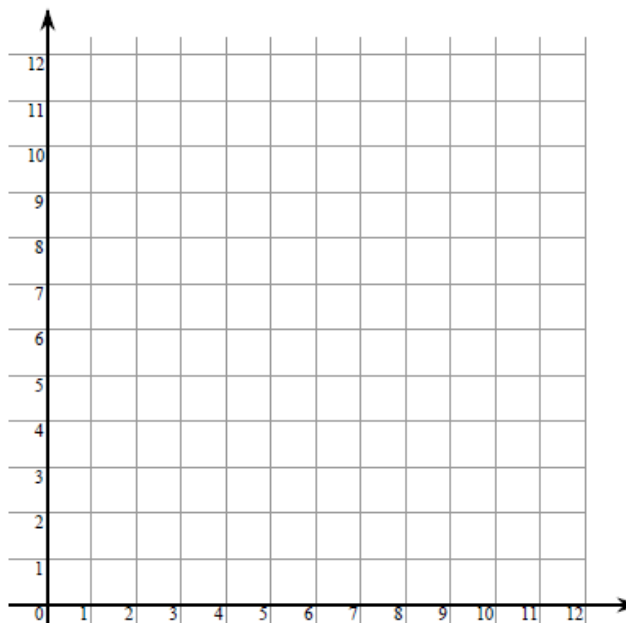


49. $\frac{2}{5}$, $\frac{9}{10}$, $\frac{1}{3}$, .50, .05

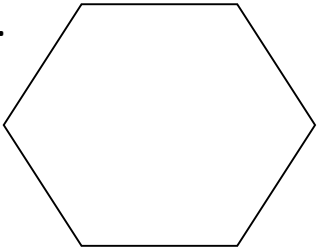
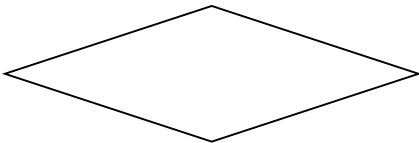
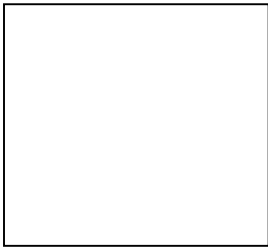
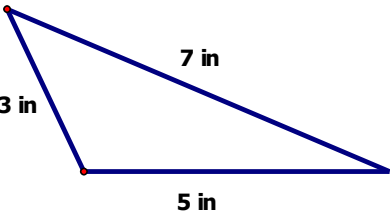
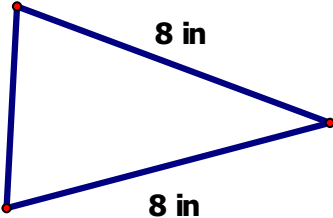
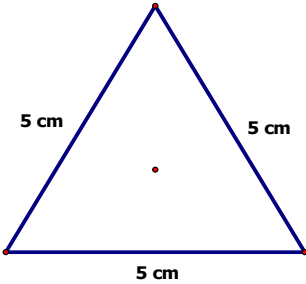
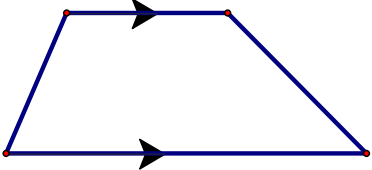
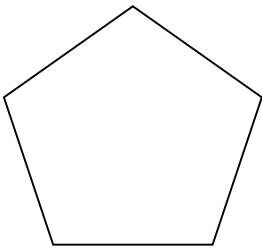



Graph and label the given points on the coordinate plane.

- 50. S (2, 5)
- U (1, 9)
- M (3, 3)
- M (10, 5)
- E (9, 10)
- R (0, 6)



Identify each of the following geometric figures by the most specific name possible. A word bank has been given at the bottom of this page. You will use each word exactly one time.

<p>51.</p>  <p>_____</p>	<p>52.</p>  <p>_____</p>	<p>53.</p>  <p>_____</p>
<p>54.</p>  <p>_____</p>	<p>55.</p>  <p>_____</p>	<p>56.</p>  <p>_____</p>
<p>57.</p>  <p>_____</p>	<p>58.</p>  <p>_____</p>	<p>59.</p>  <p>_____</p>

Isosceles Triangle

Equilateral Triangle

Scalene Triangle

Square

Pentagon**Hexagon****Rhombus****Parallelogram****Trapezoid****Complete the following application word problems. Show work to support your answers.**

60. Joanne is making iced tea for a family picnic for 34 people. The chart below shows how much iced tea each person will probably drink:

Number in each subgroup	Amount each is expected to drink
10 men	$2\frac{1}{2}$ glasses
10 women	2 glasses
14 children	$1\frac{1}{2}$ glasses

How many glasses of iced tea should Joanne prepare for the 34 people?

If the iced tea costs \$1.25 per glass to make, what will be the cost of the iced tea?

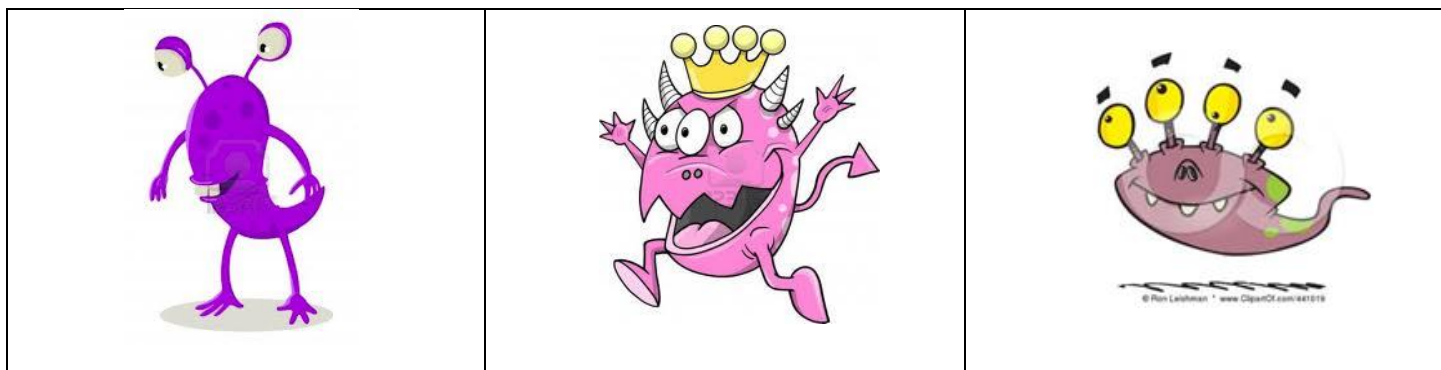
61. George is filling boxes with his baseball card collection. He has 572 cards and 11 boxes. How many cards can be put into each box if he wants them to all have an equal number of cards?

62. Lois has $\frac{1}{2}$ of a pie that she must divide equally with four friends. She cuts five pieces of pie from the $\frac{1}{2}$ pie. If all of the pieces are equal in size, what part of the total whole pie will each piece represent?

63. Clark School has to schedule 6 teams to eat lunch. The cafeteria holds 135 students. A lunch wave is 25 minutes long. Lunch can be served between 10:45 and 12:25. Teams can be split up into 2 different lunch waves as long as they are right next to each other. Make up a schedule to tell the times of the lunch waves and how many students from each team should attend each lunch wave. The teams and number of students on each team are shown below:

Cowboys 78 students	Patriots 81 students	Titans 53 students
Giants 98 students	Jets 54 students	Bears 84 students

64. The two-eyed space creatures, three-eyed space creatures and four-eyed space creatures are having a contest to see who can create groups of 24 total eyes.



a. How many two-eyed space creatures are needed to create a group with 24 eyes?

b. How many three-eyed space creatures are needed to create a group with 24 eyes?

c. How many four-eyed space creatures are needed to create a group with 24 eyes?

d. Someone told the five-eyed space creatures that they shouldn't join the contest. Explain why someone would tell them not to join the contest.



Solve.

65. 425×9	66. 729×18	67. 599×29
68. 503×12	69. $3^2 + 5(4 - 2)$	70. $3 + 4 \div 2$
71. $3 \times 7 - (2 + 5)$	72. $20 - 16 \div 4$	73. $(90 - 48) \div 6 + 2$
74. $280 \div 7$	75. $532 \div 14$	76. $8303 \div 24$

Complete the multiplication table below. You should be able to complete this task in less than 5 minutes (without a calculator!)

You are expected to know these facts so practice, practice, practice!

X	1	2	3	4	5	6	7	8	9	10	11	12
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												

Congratulations!

You have completed your 6th grade summer math packet!