

Name: _____

summer math packet

7th Grade

Happy Summer!

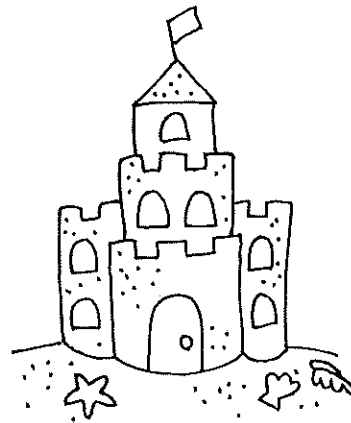
The goal of this math packet is to provide students with a few math problems per week to help combat the "summer slide". This refers to students sliding backwards over the summer because math skills are not practiced weekly like they are during the school year. For some, it is very slight, but for others, it is a dramatic drop that takes weeks of catching up at the start of the school year. For this reason, students will have a packet to work on over the summer.

The packet is required to be completed over summer break, and this packet will be collected the first day of school. The packet will be checked for completion and looked over to make sure students worked through the problems and showed their work. This will be the first grade entered into the gradebook and will count as a quiz grade.

The intention of this packet is not to have students work on it ALL summer. Each week of the required work should not take more than 20-30 minutes. My goal is to help prevent the summer slide, not take up your entire summer! There are 10 weeks of review and we have 12 weeks of summer, so however you decide to complete the work is fine.

I do suggest that you complete small chunks throughout the summer, instead of going it all at the beginning or end of the summer. I would also suggest deciding what day or days you will like to work on the packet, and try to stay on that schedule. For example, "every Wednesday morning during the summer, I will spend 25 minutes working on my math packet. If I do not finish the work for the week, I will finish it on Thursday morning". Finally, it might be helpful to use a timer and set it for 25 minutes, and have a plan to do something fun once you are done. For example, "once I spend 25 minutes working on my math packet, I will go outside and ride my bike". This is also a great tool for students that need to practice time management and organization. It might even be better for your child or schedule to work on it for 5 minutes each weekday morning. Some weeks you might need to double up a week and that is fine. Whatever works best! I have provided a schedule on the back of this page to help you schedule time that works best for your family this summer. You may complete it at the start of the summer, or as you finish each week. Once you have completed the packet please sign the bottom (both student and parent). If you misplaced your packet, a digital copy will be provided via email.

Thank you for your support and
have a fantastic summer,
Mrs. Minnick



My Summer Math Packet Schedule

Week	Date or Dates Completed	If this week's work was difficult put an X	If you marked an X what was difficult? If not, leave this column blank.	Parent Initials
Example	6/3	X	Multi digit multiplication	
Week 1				
Week 2				
Week 3				
Week 4				
Week 5				
Week 6				
Week 7				
Week 8				
Week 9				
Week 10				

I understand that this packet is required work for the summer and will be going into the gradebook as a quiz grade. Failure to complete this packet will result in a zero in the gradebook and a mark on my accountability card. This packet was also completed to the best of my ability.

Student Signature: _____

Parent Signature: _____

Summer Math Review of 6th Grade WEEK I

1. $\frac{3}{5} \div 6 =$

- A. $3\frac{3}{5}$
- B. $\frac{1}{7}$
- C. $\frac{3}{10}$
- D. $\frac{1}{10}$

6.NS.1

4. The classroom is 7 yards long. What is the length in inches?

- A. 14 inches
- B. 84 inches
- C. 252 inches
- D. 21 inches

6.RP.3d

2. Matt paid \$6.65 to download 7 songs. What is the unit rate?

- A. \$0.95 / song
- B. \$0.90 / song
- C. \$46.55/ song
- D. \$0.85 / song

6.RP.2

5. $527.3 + 6.98 =$

- A. 533.28
- B. 534.28
- C. 597.10
- D. 535.28

6.NS.3

3. Which event could be represented by the integer -5?

- A. Depositing \$5 into your bank account.
- B. Adding 5 songs to your playlist.
- C. Losing 5 yards on the play.
- D. Jumping up 5 feet on a trampoline.

6.NS.5

6. What is the ratio of circles to squares?

- A. 1:3
- B. 3:1
- C. 4:3
- D. 4:1

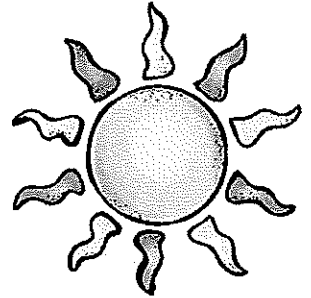


6.RP.1

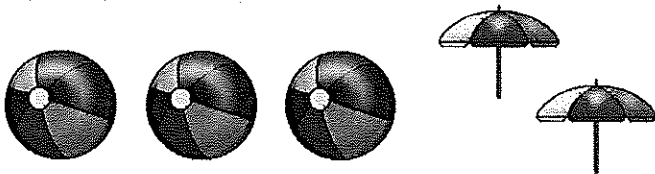
Summer Math Ratios WEEK 1

See how many questions you can answer correctly in 5 minutes. Use a timer to help keep time.

Write the number you completed correctly in the sun.



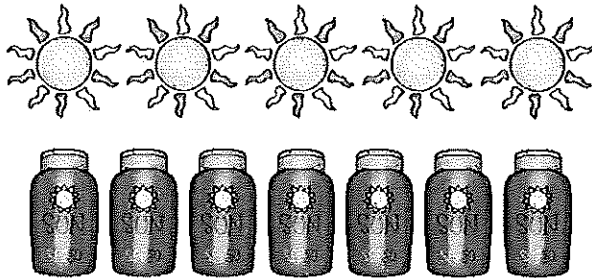
What is the ratio of beach balls to beach umbrellas?



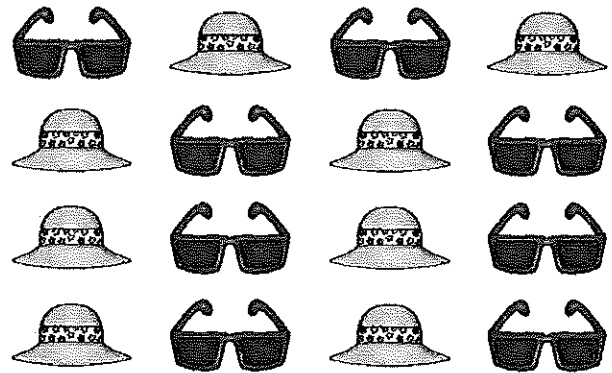
What is the ratio of shovels to buckets?



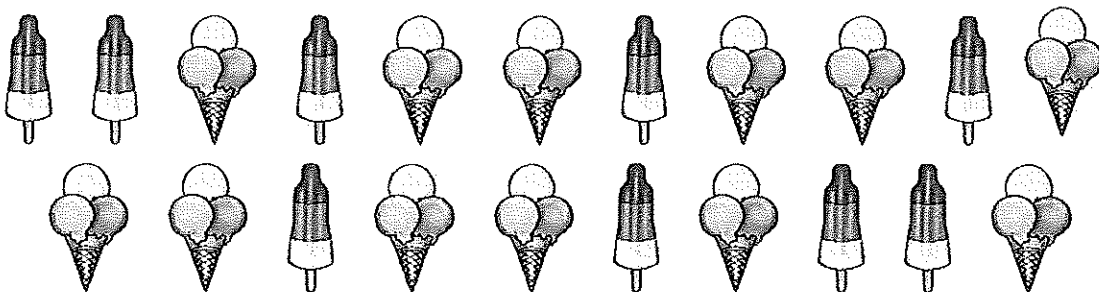
What is the ratio of sunscreen bottles to suns?



What is the ratio of sunglasses to hats?



What is the ratio of ice cream cones to popsicles?



Summer Math Review of 6th Grade WEEK 2

7. $20.35 \div 5.5 =$

- A. 0.37
- B. 370
- C. 37
- D. 3.7

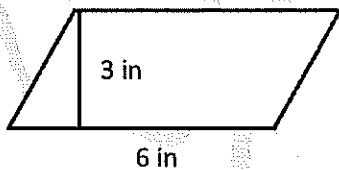
6.NS.3

10. The city's elevation is 23.5 feet below sea level. Between which 2 integers is this elevation?

- A. 23 and 24
- B. -23 and -24
- C. 0 and -23
- D. -24 and -25

6.NS.6a

8. What is the area of this parallelogram?



- A. 9 in^2
- B. 18 in^2
- C. 36 in^2
- D. 12 in^2

6.G.1

11. What is 15% of 70?

- A. 1050
- B. 10.50
- C. 101.5
- D. 1.05

6.RP.3c

9. Write an algebraic expression for 5 times the sum of y and 1.

- A. $5 \times (y + 1)$
- B. $5 \times y + 1$
- C. $5 \times (y - 1)$
- D. $5 \times (5y)$

6.EE.2a

12. $7x = 21$. Solve for x .

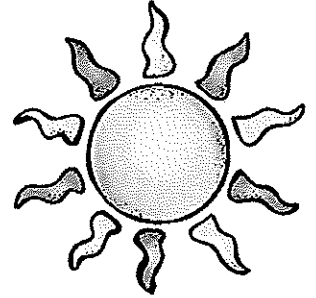
- A. $x = \frac{1}{3}$
- B. $x = 3$
- C. $x = 147$
- D. $x = \frac{1}{147}$

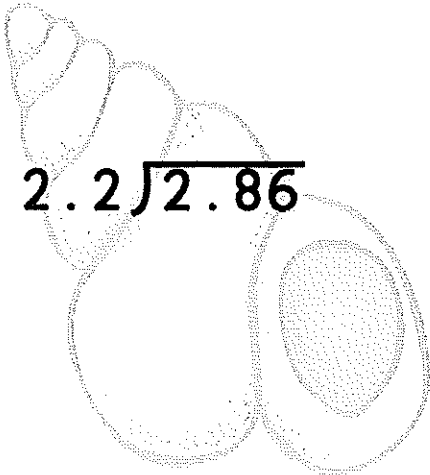
6.EE.7

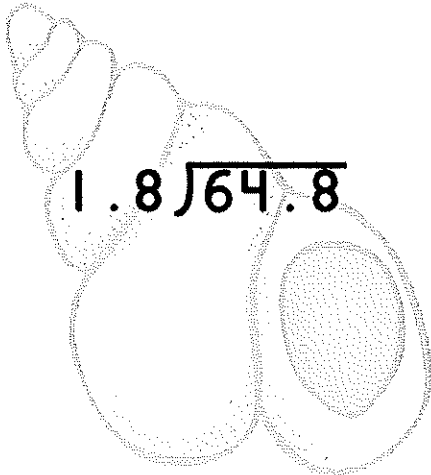
Summer Math Dividing Decimals WEEK 2

See how many questions you can answer correctly in 5 minutes. Use a timer to help keep time.

Write the number you completed correctly in the sun.



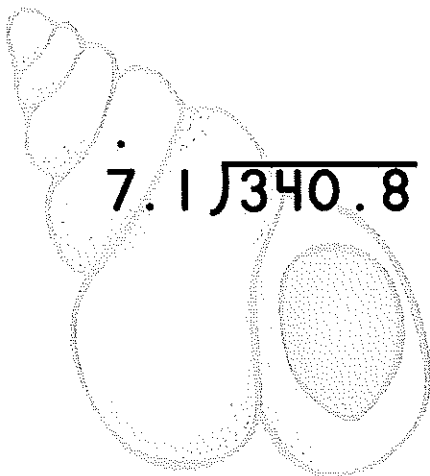

$$2.2 \overline{) 2.86}$$


$$1.8 \overline{) 64.8}$$


$$45 \overline{) 121.5}$$


$$89 \overline{) 51.62}$$


$$7.5 \overline{) 5.175}$$


$$7.1 \overline{) 340.8}$$

Summer Math Review of 6th Grade WEEK 3

13. What is the prime factorization of 140?

- A. $2 \times 2 \times 5 \times 7$
- B. $4 \times 5 \times 7$
- C. $2 \times 3 \times 5 \times 7$
- D. $5 \times 5 \times 7$

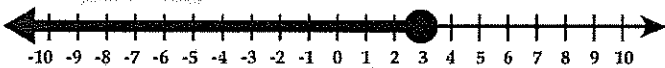
6.NS.4

16. If $x = 3$, evaluate the expression $x^2 - 1$.

- A. -5
- B. 5
- C. -8
- D. 8

6.EE.2c

14. Which inequality is shown below?



- A. $x > 3$
- B. $x \geq 3$
- C. $x \leq 3$
- D. $x < 3$

6.EE.8

17. Order from least to greatest

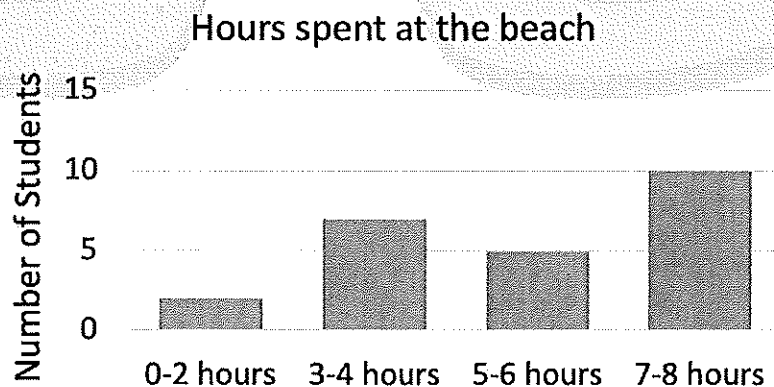
$$\frac{1}{5}, 0.3, \frac{1}{2}$$

- A. $\frac{1}{5}, \frac{1}{2}, 0.3,$
- B. $\frac{1}{2}, \frac{1}{5}, 0.3$
- C. $\frac{1}{5}, 0.3, \frac{1}{2}$
- D. $0.3, \frac{1}{2}, \frac{1}{5}$

6.NS.6c

15. The reporter asked students how much time they spent at the beach each week and displayed the information below. Which interval represents a peak?

- A. 0-2 hours
- B. 3-4 hours
- C. 5-6 hours
- D. 7-8 hours

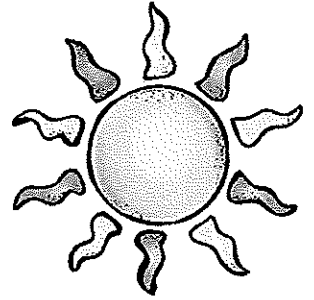


6.SP.2

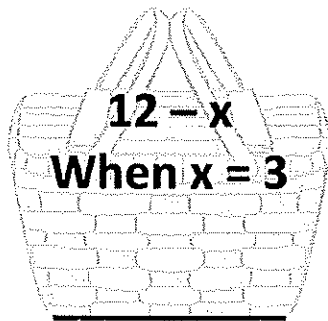
Summer Math Evaluating Expressions WEEK 3

See how many questions you can answer correctly in 5 minutes. Use a timer to help keep time.

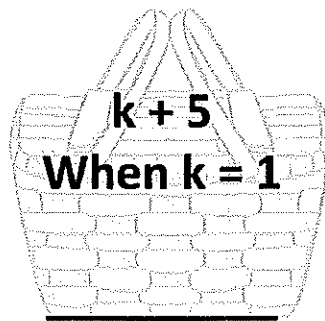
Write the number you completed correctly in the sun.



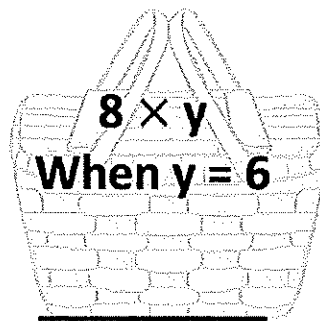
Find the value of the expressions below.


$$12 - x$$

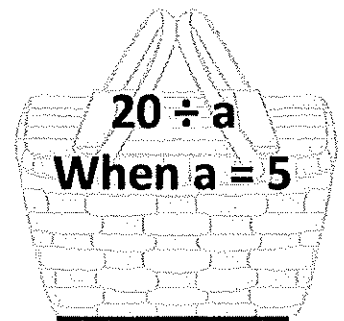
When $x = 3$


$$k + 5$$

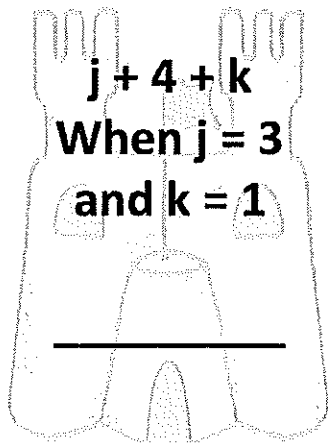
When $k = 1$


$$8 \times y$$

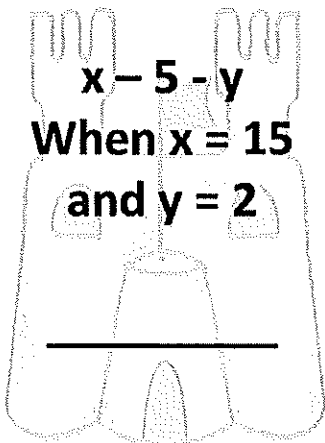
When $y = 6$


$$20 \div a$$

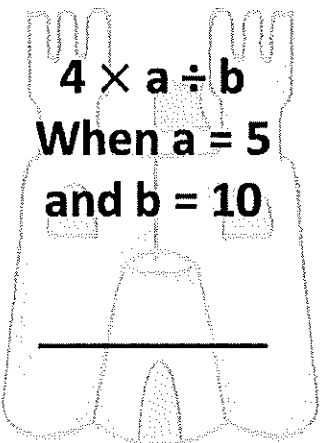
When $a = 5$


$$j + 4 + k$$

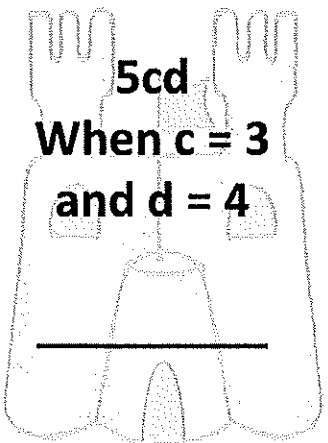
When $j = 3$
and $k = 1$


$$x - 5 - y$$

When $x = 15$
and $y = 2$

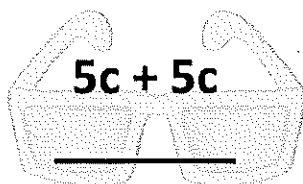

$$4 \times a \div b$$

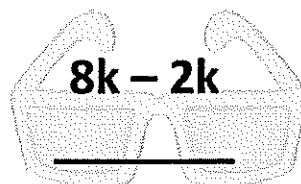
When $a = 5$
and $b = 10$

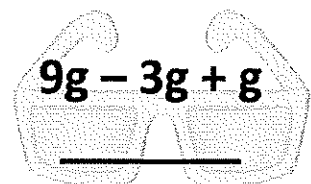

$$5cd$$

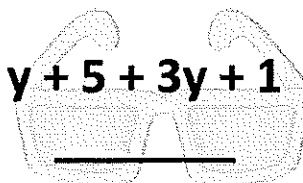
When $c = 3$
and $d = 4$

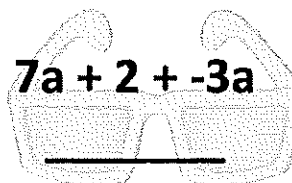
Combine like terms below.

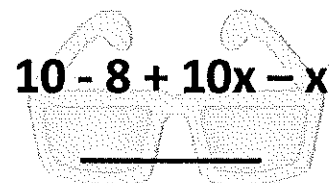

$$5c + 5c$$


$$8k - 2k$$


$$9g - 3g + g$$


$$y + 5 + 3y + 1$$


$$7a + 2 + -3a$$


$$10 - 8 + 10x - x$$

Summer Math Review of 6th Grade WEEK 4

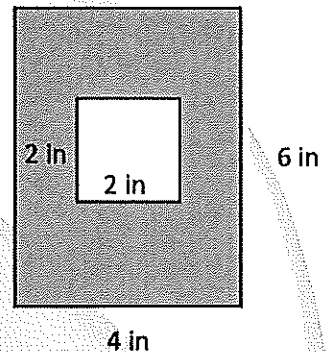
18. Write an equation for this word sentence: one fourth of a number equals 5.

- A. $\frac{1}{4} = 5$
- B. $\frac{1}{4}n = 5$
- C. $4n = 5$
- D. $\frac{1}{4} + n = 5$

6.EE.7

21. Find the area of the shaded region.

- A. 10 in^2
- B. 28 in^2
- C. 20 in^2
- D. 24 in^2



6.G.1

19. Katie divided a drink with a volume of $3\frac{1}{2}$ cups into $\frac{1}{2}$ cup servings. How many servings did she have?

- A. 10
- B. 7
- C. 6
- D. 3

6.NS.2

22. $4\frac{1}{2} \div 2\frac{1}{2} =$

- A. 2
- B. $11\frac{1}{4}$
- C. $2\frac{1}{2}$
- D. $1\frac{4}{5}$

6.NS.1

20. The ratio of girls to boys is 2:3. If there are 14 girls, how many boys are there?

- A. 2
- B. 3
- C. 14
- D. 21

6.RP.1

23. The football team either gained or lost yards on 5 different plays: -5, 3, -3, 0, 5. Order these 5 numbers from greatest to least.

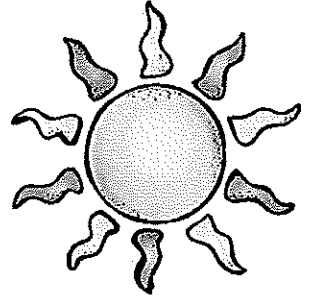
- A. 5, 3, 0, -3, -5
- B. 5, 3, 0, -5, -3
- C. -5, -3, 0, 3, 5
- D. -3, -5, 0, 3, 5

6.NS.7a

Summer Math Multiplying Decimals WEEK 4

See how many questions you can answer correctly in 5 minutes. Use a timer to help keep time.

Write the number you completed correctly in the sun.



$$\begin{array}{r} 176 \\ \times 0.65 \\ \hline \end{array}$$

$$\begin{array}{r} 28.7 \\ \times 5.6 \\ \hline \end{array}$$

$$\begin{array}{r} 3.98 \\ \times 48 \\ \hline \end{array}$$

$$\begin{array}{r} 0.894 \\ \times 18 \\ \hline \end{array}$$

$$\begin{array}{r} 0.405 \\ \times 0.39 \\ \hline \end{array}$$

$$\begin{array}{r} 5.14 \\ \times 2.8 \\ \hline \end{array}$$

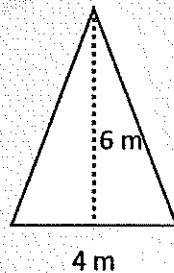
$$\begin{array}{r} 62.3 \\ \times 17 \\ \hline \end{array}$$

$$\begin{array}{r} 0.109 \\ \times 8.7 \\ \hline \end{array}$$

Summer Math Review of 6th Grade WEEK 5

24. What is the area of this triangle?

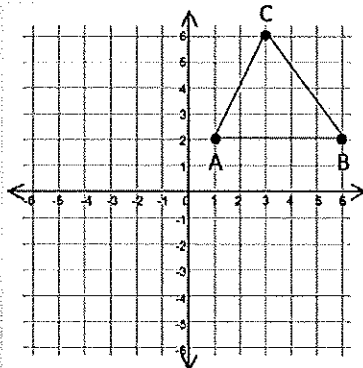
- A. 36 m^2
- B. 24 m^2
- C. 12 m^2
- D. 48 m^2



6.G.1

25. For $\triangle ABC$, what is the length of $\overline{AB}$?

- A. 3
- B. 4
- C. 5
- D. 6



6.G.3

27. The table shows home runs for 2 baseball players over 5 games. Which statement is true?

Home runs in baseball	
Steve	2, 1, 2, 0, 1
Henry	0, 0, 2, 1, 1

- A. The mean for Steve and Henry is the same.
- B. The mean for Steve is greater than the mean for Henry.
- C. The mean for Henry is greater than the mean for Steve.
- D. The range is NOT the same.

6.SP.3

26. Jose reads 45 pages of his novel in 3 hours. At that rate, how many pages would he read in 5 hours?

- A. 60
- B. 75
- C. 90
- D. 105

6.RP.3a

28. $37.4 \times 1.9 =$

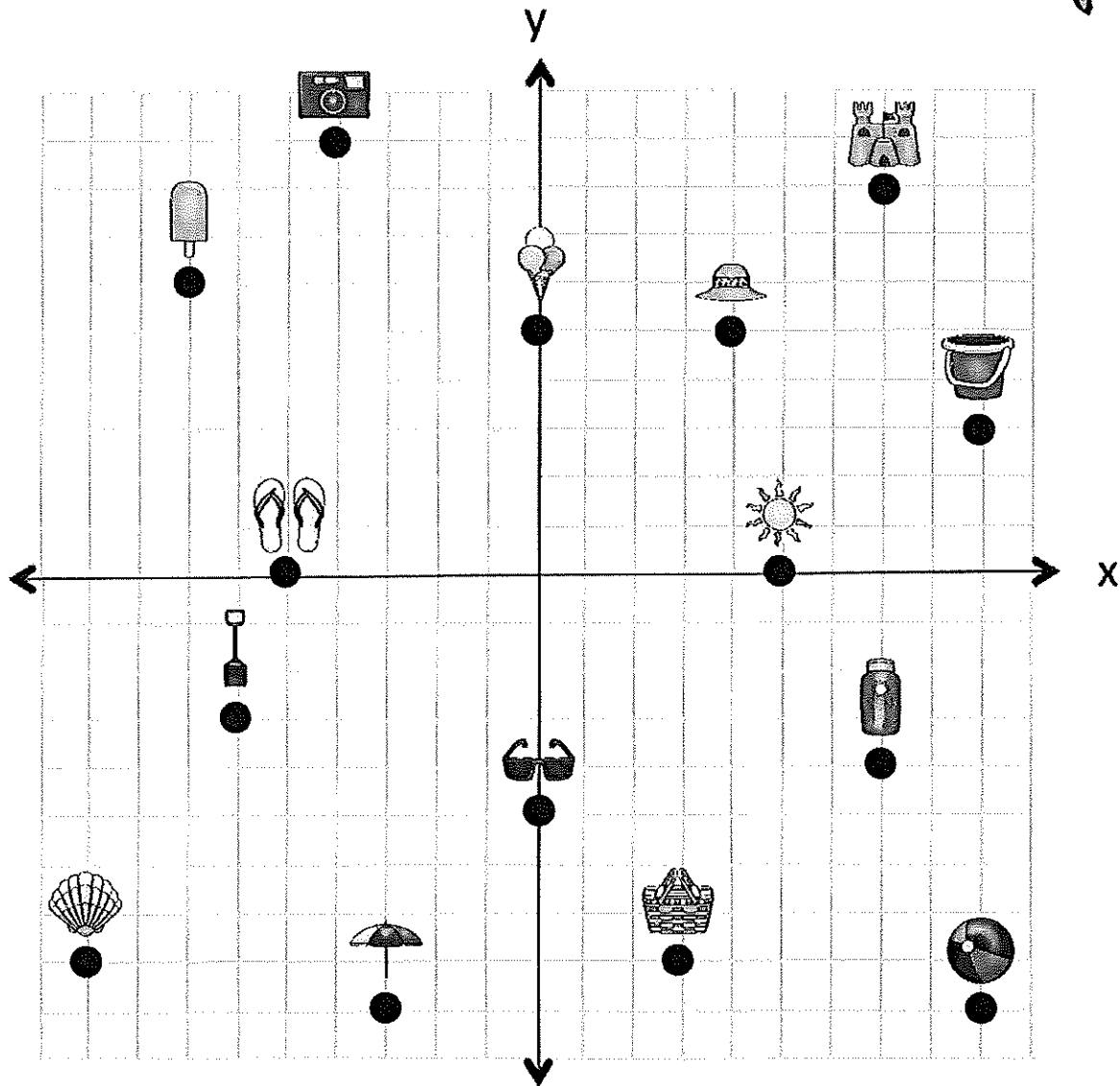
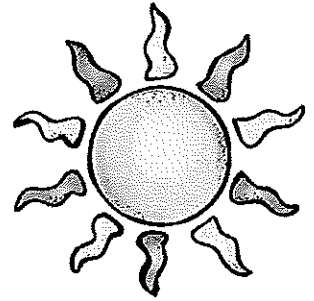
- A. 71.06
- B. 710.6
- C. 70.06
- D. 700.6

6.NS.3

Summer Math Coordinate Plane WEEK 5

See how many questions you can answer correctly in 5 minutes. Use a timer to help keep time.

Write the number you completed correctly in the sun.



What images are at the following coordinates?

(7,8) _____ (3,-8) _____

(-7,6) _____ (-9,-8) _____

(5,0) _____ (9,-9) _____

(7,-4) _____ (0,5) _____

(-5,0) _____ (0,-5) _____

Summer Math Review of 6th Grade WEEK 6

29. Evaluate the following expression

$$2(3 - 2x)$$

- A. $23 - 22x$
- B. $6 - 6x$
- C. $6 - 4x$
- D. $4 - 4x$

6.EE.3

32. The location of the pool is represented by the point $(-24, 10)$. In which quadrant is this point?

- A. Quadrant I
- B. Quadrant II
- C. Quadrant III
- D. Quadrant IV

6.NS.6b

30. Which of the following has a value less than 0?

- A. 7
- B. $|7|$
- C. $|-7|$
- D. -7

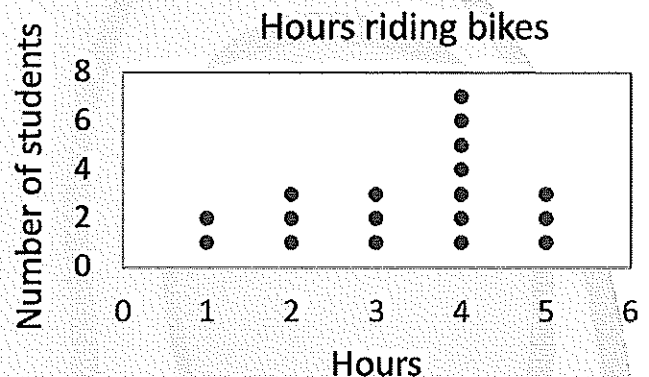
6.NS.7c

31. What is 130% as a decimal and a fraction in simplest form?

- A. 1.3 and $1\frac{3}{100}$
- B. 1.3 and $1\frac{3}{10}$
- C. 130 and $1\frac{3}{100}$
- D. 130 and $1\frac{3}{10}$

6.RP.3c

33. The dot plot shows the number of hours students rode their bikes last week. What is the most common number of hours?



- A. 2
- B. 3
- C. 4
- D. 5

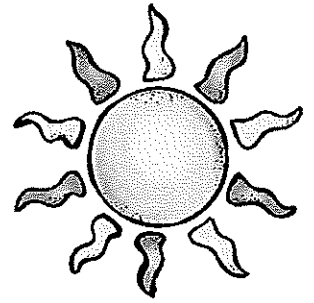
6.SP.4

Summer Math 4 digit by 2 digit Multiplication

WEEK 6

See how many questions you can answer correctly in 5 minutes. Use a timer to help keep time.

Write the number you completed correctly in the sun.



$$\begin{array}{r} 1,783 \\ \times 59 \\ \hline \end{array}$$

$$\begin{array}{r} 4,692 \\ \times 60 \\ \hline \end{array}$$

$$\begin{array}{r} 5,501 \\ \times 71 \\ \hline \end{array}$$

$$\begin{array}{r} 8410 \\ \times 82 \\ \hline \end{array}$$

$$\begin{array}{r} 2,329 \\ \times 43 \\ \hline \end{array}$$

$$\begin{array}{r} 3,238 \\ \times 36 \\ \hline \end{array}$$

$$\begin{array}{r} 6,147 \\ \times 25 \\ \hline \end{array}$$

$$\begin{array}{r} 7056 \\ \times 14 \\ \hline \end{array}$$

Summer Math Review of 6th Grade WEEK 7

34. The expression $3(a + 5)$ is equivalent to which expression?

- A. $3 + a + 5$
- B. $3a + 8$
- C. $3a + 5$
- D. $3a + 15$

6.EE.4

37. $\frac{5}{8} \times \frac{2}{3} =$

- A. $\frac{7}{12}$
- B. $\frac{10}{25}$
- C. $\frac{5}{12}$
- D. $\frac{5}{24}$

6.NS.4

35. The camp is divided into 2 groups. There are 14 kids in Camp A and 21 kids in Camp B. If you divided both camps into groups of equal size, how many students are in a group?

- A. 7
- B. 6
- C. 5
- D. 4

6.NS.4

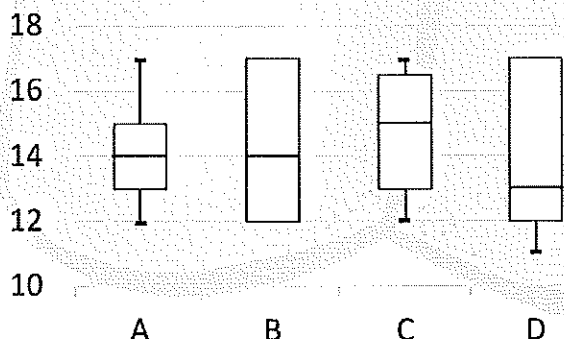
38. Evaluate the expression

$$6^2 - (3^2 + 1)$$

- A. 29
- B. 2
- C. 5
- D. 26

6.EE.1

36. Which of the following is a box & whisker plot for 12, 14, 15, 16, 17?



6.SP.4

39. The linear equation $y = 3x$ represents the cost y of x pounds of strawberries. Which ordered pair lies on the graph of the equation?

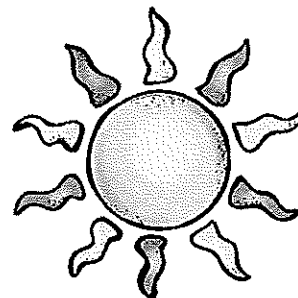
- A. (2, 6)
- B. (1, 0)
- C. (6, 2)
- D. (0, 1)

6.EE.9

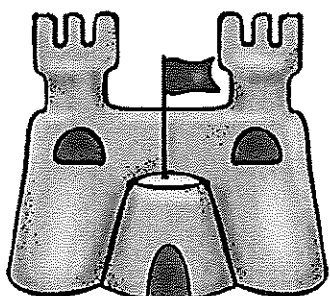
Summer Math Unit Rate Word Problems WEEK 7

See how many questions you can answer correctly in 5 minutes. Use a timer to help keep time.

Write the number you completed correctly in the sun.



Team A built 8 sandcastles in 2 hours and
Team B built 5 sandcastles in 1 hour.
Which team worked at a faster rate?



How many sandcastles will Team A build in
3 hours?

How many sandcastles will Team B build in
4 hours?

John Paul and Susie collected seashells at
the beach.

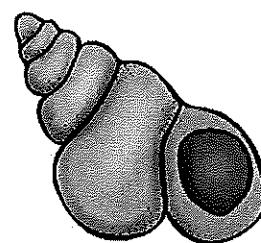
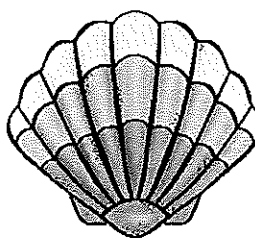
John Paul collected $\frac{20 \text{ seashells}}{\text{hour}}$

Susie collected $\frac{25 \text{ seashells}}{\text{hour}}$

How many seashells did John Paul collect
after 2 hours?

How many seashells did Susie collect after
2 hours?

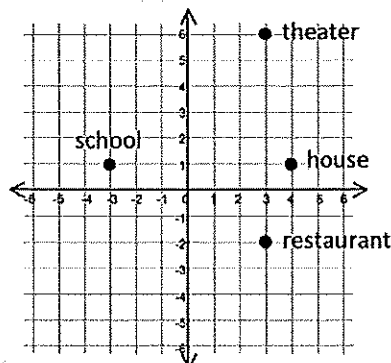
How many total seashells did they both
collect after 2 hours?



Summer Math Review of 6th Grade WEEK 8

40. Each unit is 1 mile. What is the distance from the school to the house?

- A. 8 miles
- B. 7 miles
- C. 6 miles
- D. 5 miles



6.NS.8

43. What is the mean, median, and mode for this set of data: 14, 10, 16, 14, 11?

- A. 14, 11, 14
- B. 12, 13, 14
- C. 13, 14, 13
- D. 13, 14, 14

6.SP.5c

41. The cat's weight changed -8 oz. while she was sick. Which of the following shows a greater change in weight?

- A. Loss of 9 oz.
- B. Loss of 6 oz.
- C. Gain of 5 oz.
- D. Gain of 3 oz.

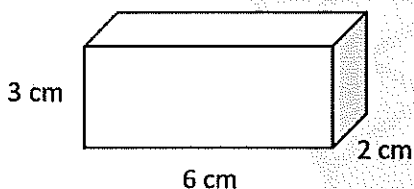
6.NS.7d

44. Order these integers from least to greatest: -9, 9, 0, 6, -6

- A. -6, -9, 0, 6, 9
- B. -9, -6, 0, 6, 9
- C. 9, 6, 0, -6, -9
- D. 9, 6, 0, -9, -6

6.NS.7a

42. What is the volume?



- A. 11 cm^3
- B. 18 cm^3
- C. 36 cm^3
- D. 72 cm^3

6.G.2

45. If 2 bags of grapes weigh 6 pounds, how many pounds do 5 bags weigh?

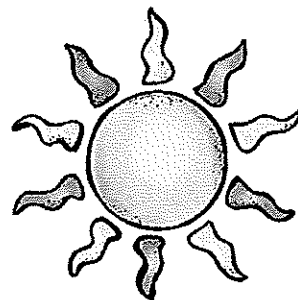
- A. 15 pounds
- B. 20 pounds
- C. 25 pounds
- D. 9 pounds

6.RP.3b

Summer Math Dividing Fractions WEEK 8

See how many questions you can answer correctly in 5 minutes. Use a timer to help keep time.

Write the number you completed correctly in the sun.



Use the space below the problem to rewrite your division problem as a multiplication problem.

$$\frac{2}{10} \div \frac{4}{5} =$$

$$\text{---} \times \text{---} = \text{---}$$

$$\frac{3}{7} \div \frac{9}{14} =$$

$$\text{---} \times \text{---} = \text{---}$$

$$\frac{5}{15} \div \frac{15}{3} =$$

$$\text{---} \times \text{---} = \text{---}$$

$$\frac{2}{9} \div \frac{8}{3} =$$

$$\text{---} \times \text{---} = \text{---}$$

$$\frac{4}{20} \div \frac{16}{5} =$$

$$\text{---} \times \text{---} = \text{---}$$

$$\frac{8}{18} \div \frac{16}{6} =$$

$$\text{---} \times \text{---} = \text{---}$$

Summer Math Review of 6th Grade WEEK 9

46. The high temperatures for the week were 87, 82, 100, 83, and 88. What is the mean of the temperatures without the outlier?

A. 85
B. 84
C. 88
D. 87

6.SP.5d

47. Jamal records how much time he spends playing video games every day for 5 days. Which is not a statistical question for this situation?

A. What is the average amount of time each day?
B. What is the total amount of time?
C. Which game is his favorite?
D. On which day did he spend the most time playing video games?

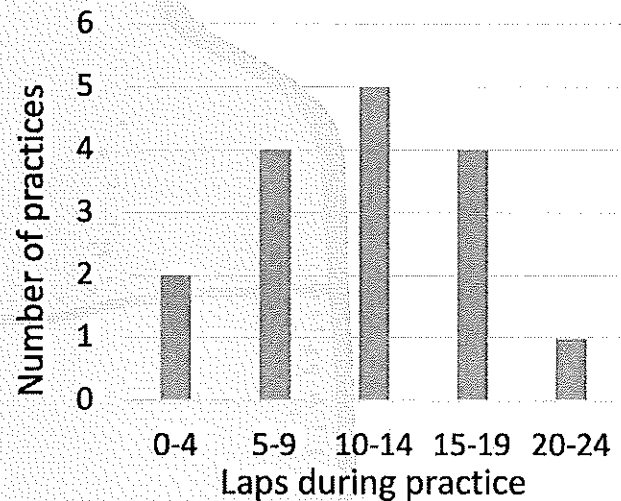
6.SP.1

48. Helen wants to have cake for her party. She needs 1 cake for every 8 people. Which expression helps her decide how many cakes to buy if p represents the number of people?

A. $8p$
B. $\frac{1}{8}p$
C. $8 + p$
D. $p - 8$

6.EE.6

49. A swim team coach recorded the number of laps that kids swam during practices. In how many practices did they swim 15-19 laps?



A. 2
B. 3
C. 4
D. 5

6.SP.5a

50. A rectangular prism measures 6 inches by 4 inches by 2 inches. What is the surface area?

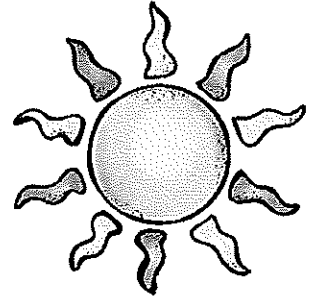
A. 22 in^2
B. 44 in^2
C. 88 in^2
D. 100 in^2

6.G.4

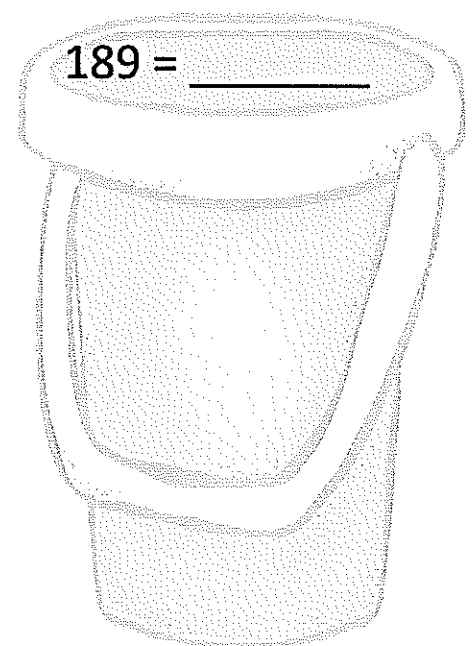
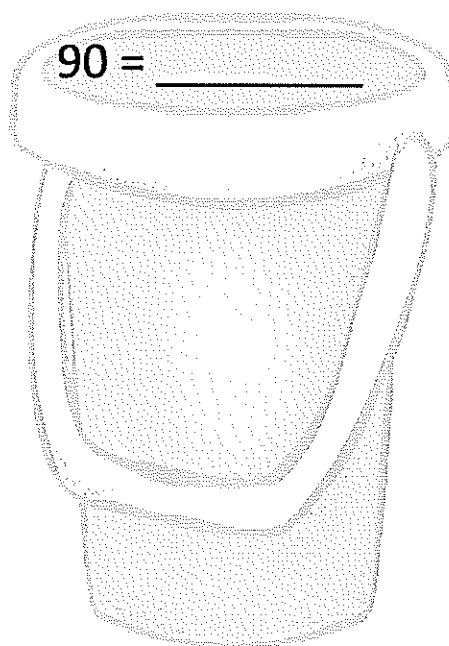
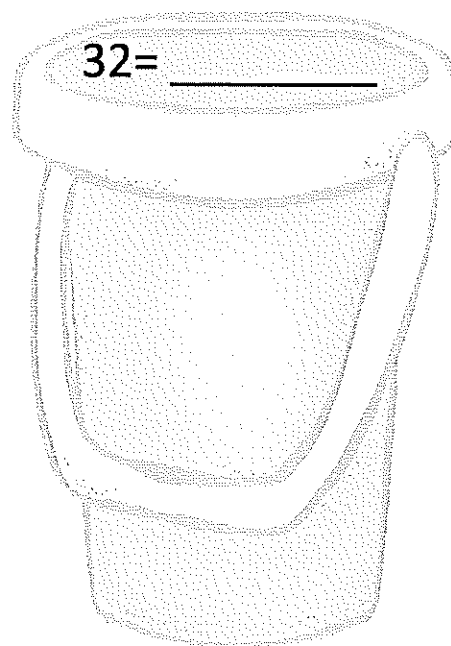
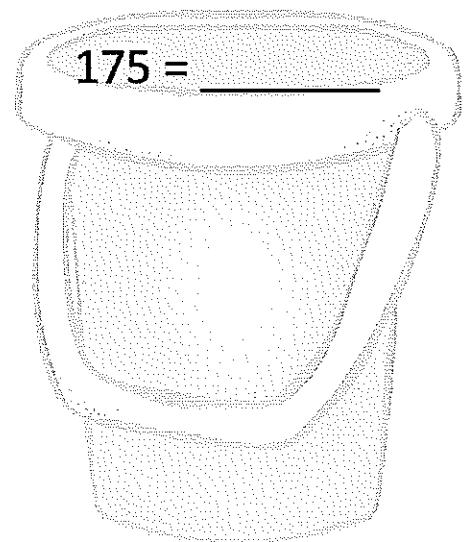
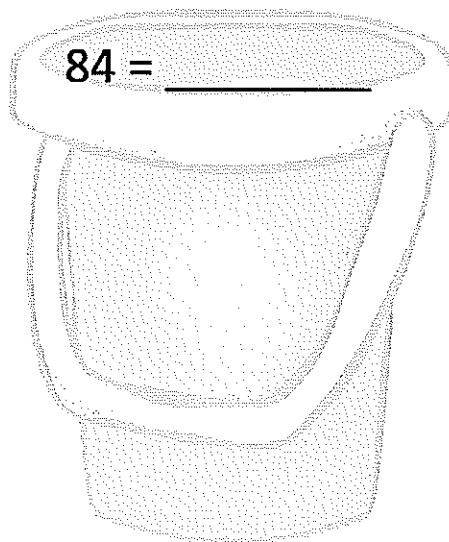
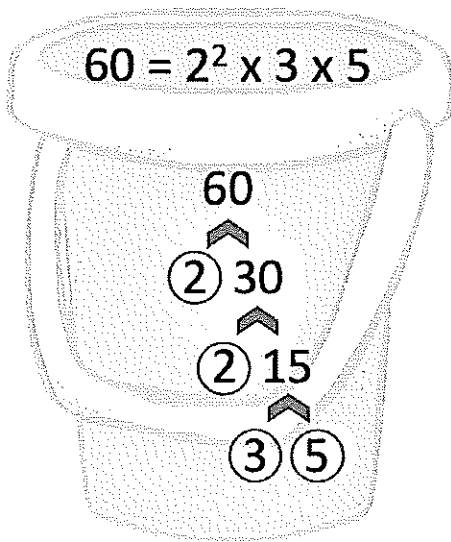
Summer Math Prime Factorization WEEK 9

See how many questions you can answer correctly in 5 minutes. Use a timer to help keep time.

Write the number you completed correctly in the sun.



Complete the factor tree for the following numbers. Make sure you circle your prime numbers. The first one is done for you.



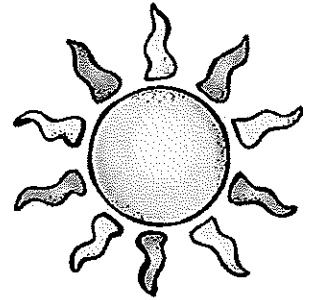
Summer Math Review of 6th Grade WEEK 10

51. Is $k = 6$ a solution to the equation $\frac{1}{3}k = 3$? A. Yes B. No, $k = 9$ C. No, $k = 3$ D. No, $k = 18$ 6.EE.5	54. Order these numbers from <u>greatest</u> to <u>least</u>. $-\frac{1}{2}, -\frac{1}{4}, 0, 0.3, 0.2$ A. $0.3, 0.2, 0, -\frac{1}{4}, -\frac{1}{2}$ B. $-\frac{1}{2}, -\frac{1}{4}, 0, 0.2, 0.3$ C. $0.2, 0.3, 0, -\frac{1}{2}, -\frac{1}{4}$ D. $0.3, 0.2, 0, -\frac{1}{2}, -\frac{1}{4}$ 6.NS.7b
52. How many terms are in the following expression? $6x + 1$ A. 1 B. 2 C. 3 D. 0 6.EE.2b	55. $x + 8 = 12$ A. $x = 4$ B. $x = 20$ C. $x = 8$ D. $x = 5$ 6.EE.7
53. The reporter interviewed 10 tourists from Ohio about the schools in Florida. Which of the following is true? A. This is a sample of all tourists. B. These tourists are biased. C. These tourists are not biased. D. This is a random sample. 6.SP.5b	56. $218.01 \div 4.3 =$ A. 0.507 B. 5.07 C. 50.7 D. 507 6.NS.3

Summer Math 4 digit by 2 digit Long Division WEEK 10

See how many questions you can answer correctly in
5 minutes. Use a timer to help keep time.

Write the number you completed correctly in the sun.



$$25 \overline{)2700}$$

$$41 \overline{)8733}$$

$$38 \overline{)3686}$$

$$54 \overline{)2538}$$

$$95 \overline{)6745}$$

$$79 \overline{)4898}$$