

NAME _____

Students Entering Math 7 Summer Packet 2019

The purpose of this packet is for you to practice your math skills and review your knowledge of concepts covered in previous math classes. **(NOTE: If lost, the packet can be found on the school website.)**

The packet will be collected on Friday, September 6th. **ALL work must be shown in the space provided on the packet.** The packet will be given a score and count as your **FIRST TEST** grade.

Thank you in advance for completing this packet.

Name _____

Summer Math Packet
for Students Entering 7th Grade in September
ALL WORK MUST BE SHOWN

Numeric Response

Find the value of the power.									
1. 2^7	2. 7^3								
Evaluate the expression.									
3. $9 - 24 \div 6$	4. $2^4 + 2(10 - 4) - 3$								
5. You buy 1 sweater, 3 T-shirts, and 2 pairs of jeans online. What is your total cost?									
<table border="1" style="margin: auto; border-collapse: collapse;"><thead><tr><th style="padding: 5px;">Item</th><th style="padding: 5px;">Cost per item</th></tr></thead><tbody><tr><td style="padding: 5px;">Sweater</td><td style="padding: 5px;">\$17</td></tr><tr><td style="padding: 5px;">T-shirt</td><td style="padding: 5px;">\$14</td></tr><tr><td style="padding: 5px;">Jeans</td><td style="padding: 5px;">\$32</td></tr></tbody></table>		Item	Cost per item	Sweater	\$17	T-shirt	\$14	Jeans	\$32
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Add or subtract. Write the answer in simplest form.

6. $\frac{2}{7} + \frac{2}{3}$

7. $\frac{3}{5} - \frac{1}{4}$

8. You are filling identical fruit bowls using 36 apples and 48 oranges. What is the greatest number of bowls that you can fill using all of the fruit?

9. An electrician charges \$322 for 7 hours of work. How much does the electrician charge per hour?

Find the LCM of the numbers.

10. 6, 8

11. 3, 16, 20

12. You have 64 inches of blue fabric and 96 inches of green fabric. You want to cut the fabric into pieces of equal length with no leftovers. What is the greatest length of the pieces that you can make?

13. Two families are each driving 825 miles in two different cars. The Romano family car gets an average of 33 miles per gallon, and the Clark family car gets an average of 25 miles per gallon. If gas costs \$4.00 per gallon, how much more will the Clark family spend for gas?

14. Find the number represented by the prime factorization.

$$2^2 \cdot 5^3 \cdot 7$$

Add or subtract.

15. $7.43 + 9.25$

16. $10.06 - 3.82$

Multiply. Use estimation to check your answer.

17. 7.26×8

18. 3.2×0.45

Divide. Use estimation to check your answer.

19. $6.21 \div 3$

20. $0.0225 \div 0.03$

21. How much will a bag of chips and a drink cost you when you have a coupon for 75 cents off the total price?

Item	Price
Chips	\$1.29
Drink	\$0.89

22. Beatrice bought 8 sandwiches for \$40.72. Each sandwich was the same price. What was the price, in dollars, of each sandwich?

Evaluate the expression when $a = 4$, $b = 2$, and $c = 8$.

23. $a + 7$

24. bc

25. $\frac{c}{a}$

Evaluate the expression when $x = 4$ and $y = 1$.

26. $12 - x$

27. $5y$

28. $\frac{18}{x}$

Write the fraction or mixed number as a percent.

29. $\frac{5}{8}$

30. $\frac{7}{8}$

Find the percent of the number.

31. 20% of 9

32. 140% of 15

Write a positive or negative integer that represents the situation.

33. You drop 8 feet down a slide.

34. You get a \$1 raise.

35. Sarah lost 3 points on her test.

36. A swimmer is 4 feet below the surface of the water.

At batting practice, 10 batters were each thrown 20 pitches. The numbers of pitches the batters hit are shown below.

5, 16, 8, 8, 11, 7, 3, 6, 4, 2

37. What is the median number of pitches that the batters hit?

38. How many students are in the class?

Use the following data that show the numbers of text messages sent by some students.

31, 50, 58, 1, 25, 46, 48, 55, 28, 34, 33, 45, 53, 46, 47

39. How many students sent less than 40 text messages?

40. Find the mean of the data.

41. Find the median of the data.

42. Find the mode of the data.

43. Find the range of the data.

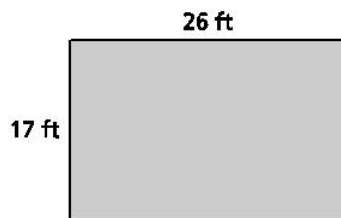
Short Answer

1. Find the *GCF* of the numbers using prime factorization.

17, 39

2. What is the prime factorization of the number 60?

3. What is the area of the rectangle below?

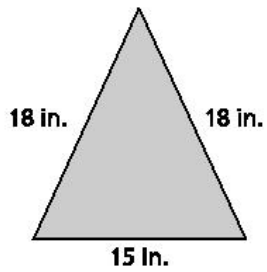


Find the *LCM* of the numbers.

4. 6, 14, 18

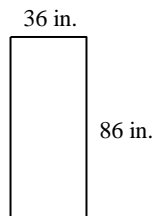
5. 98

6. What is the perimeter of the triangle below?

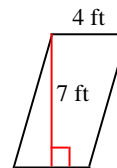


Find the area.

7.



8.



Add or subtract. Write the answer in simplest form.

9. $4\frac{5}{6} - 2\frac{7}{8}$

10. $1\frac{3}{8} + 4\frac{1}{2}$

11. A town received $2\frac{3}{4}$ inches of rain one day and $5\frac{2}{5}$ inches the next day. How many inches of rain fell in the town over the two days?

12. Katie has 48 stickers that she wants to put into an album. She wants to divide them into equal groups so that each page has at least 4 stickers but no more than 8 stickers. What are the possible numbers of pages and stickers?

Multiply. Write the answer in the simplest form.

13. $2\frac{4}{9} \times 3\frac{1}{2}$

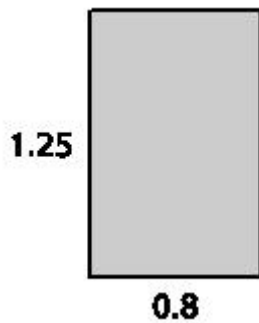
14. $3 \times \frac{8}{9}$

Divide. Write the answer in the simplest form.

15. $\frac{5}{8} \div \frac{1}{2}$

16. $3\frac{3}{16} \div 2\frac{5}{6}$

17. Find the area of the rectangle.



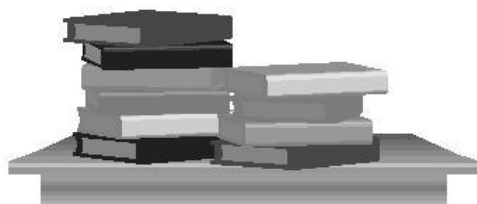
18. The family room in your house is $6\frac{1}{2}$ yards long and $5\frac{3}{4}$ yards wide.

a. How many square feet do you need to carpet the room?

b. Carpet costs \$16 per square yard. How much will it cost to buy carpet for the family room?

19. Which deal is a better buy?

\$5.90 each
Buy 3, get 1 FREE!



6 for
\$24.96



Write the expressions using exponents.

20. $r \cdot r \cdot r \cdot r \cdot r \cdot r$

21. $4 \cdot d \cdot d \cdot d \cdot d$

22. Complete the table.

x	$4x - 1$
1	
3	
5	

Write the phrase as an expression.

23. The sum of 25 and 14

24. a number y divided by 7

25. a number x multiplied by 3

26. 4 less than a number w

27. Use the Distributive Property to simplify the expression.

$$7(x + 3)$$

Write the ratio. Explain what the ratio means.

28. bottles to cans



29. forks to spoons



Write a unit rate for the situation.

30. 250 words in 5 minutes

31. \$1.98 for 5 bananas

32. Decide if the following rates are equivalent.

12 pages in 20 minutes

20 pages in 32 minutes

33. You can buy an 8-pack of paper towels for \$7.92 or a 12-pack for \$11.64. Which is the better buy?

Complete the statement using < or >.

34. -3 _____ 1

35. -6 _____ -8

Order the integers from least to greatest.

36. $2, -3, 0, 4, -1$

37. $4, -7, 0, -1, -3$

Write the word sentence as an equation.

38. 3 increased by a number x is 9

39. The product of a number y and 3 is 6

Solve the equation. Check your solution.

40. $y \div 9 = 81$

41. $15 \times b = 60$

42. $7 + m = 7$