The Math Department at Quarry Lane School has a challenging and enriching curriculum. We want to ensure each student is well prepared for the following school year. It's important for our students to keep up with their math skill over for the long summer break. Studies indicate that students lose a huge percentage of what they learned from the prior school year. In order to be proactive, Quarry Lane School Math Department would like to provide you with the following math grade level supplements.

These packets are for your student to practice during the long summer break. Each packet contains practice worksheets. Your student can do the practice worksheets at their own pace. Please encourage your student to complete this work and grade it using the answer keys provided.

Have a safe and fun-filled summer!

Name _____

Write the correct answer.

1. An estimate that is less than the exact answer is called a(n) __?__ .

_____

2. In the expression 3^2, the number 3 is called the __?__ .

_____

3. What is the value of the 5 in 8.675309?

_____

4. $3.1\overline{)58.9}$

_____

5. Estimate the sum.

$$\begin{array}{r} 3{,}807 \\ +\ 1{,}288 \\ \hline \end{array}$$

_____

6. $9 - 16 \div 4 + 8$

_____

7. Order the numbers from *greatest* to *least*.

3.417, 3.471, 3.447, 3.474

_____

8. 18.7×407.52

_____

9. 250×15

_____

10. Find the value of 4^5.

_____

11. Estimate.

$28.1 \div 7.35$

_____

12. Evaluate $d \times (6.94 + g)$ for $d = 4.2$ and $g = 3.14$.

_____

13. Estimate the quotient.

$4{,}777 \div 81$

_____

14. Evaluate $c^3 + m \times c$ for $c = 4$ and $m = 7$.

_____

Go On

Name _____

15. Order the numbers from *greatest* to *least*.

0.880, 0.804, 0.808

_____

16. Solve the equation using mental math.

$c = 417 \div 4.17$

_____

17. Chris collected a total of 60 shells during a weekend at the beach. He collected three times as many shells on Saturday as he did on Sunday. How many shells did he collect on Sunday?

_____

18. Lynda began a craft project with a piece of copper wire 36 in. long. From this she cut 2 pieces that were each 3.5 in. long, 3 pieces that were each 4.75 in. long, and 1 piece that was 11.5 in. long. How much wire did she have left?

_____

19. Write a percent that is equivalent to 0.54.

_____

20. Maggie bought two CDs at the mall. One was priced $11.98, and the other was $13.45. What was the difference in their prices?

_____

21. Solve the equation using mental math.

$30y = 360$

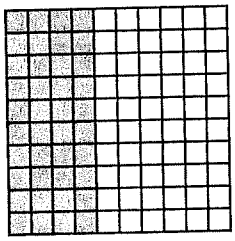
_____

22. Evaluate the expression.

$48 \div (8 - 6)^2 + 11$

_____

23. Write the decimal and percent for the shaded area.



_____

24. A pool is losing water through a leak at a constant rate of one gallon every 2.5 days. How much water does the pool lose in 4 weeks?

_____

25. Evaluate $t - w + 31$ for $t = 47$ and $w = 18$.

_____

26. $(4 + 2)^3$

_____

Go On

Name _____

27. At a gymnastics meet, Katherine scored 9.15 on the balance beam, 9.06 on the vault, and 9.10 on the uneven parallel bars. In which event did she receive the lowest score?

_____

28. Michael's father made bags of party favors for the 12 friends that came to Michael's party. For each bag he bought 2 packs of baseball cards for $1.59 each, 1 pack of bubblegum for $0.49, and a kazoo for $0.25. How much did he spend on party favors?

_____

29. $\begin{array}{r} 456{,}391 \\ -\ 88{,}012 \\ \hline \end{array}$

_____

30. Use mental math to find the value of $28 + (41 - 9)$.

_____

31. Estimate the product.

389.896×24.502

_____

32. Evaluate $c + 56.78$ for $c = 23.4$.

_____

33. It rained a total of 46 days in March and April. It rained 8 more days in April than in March. How many days did it rain in March?

_____

34. David, Gary, Susan, and Walter are meeting at the mall. The time it takes for each to ride to the mall is shown below. To arrive at the same time, in what order should they leave their homes?

David	25 minutes
Gary	15 minutes
Susan	30 minutes
Walter	10 minutes

_____

35. Write the value of the 2 in 8.32971.

_____

36. How many complete rows of 15 parking spaces are needed to park 280 cars?

_____

37. Use mental math to solve.

$440 = 11g$

_____

38. $(56 \div 4) + (9 - 3)^2$

_____

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Go On

Name _____

39. Diane saw on a schedule that the first tram leaving the parking lot departs at 8:42 A.M. Trams then depart every 12 min. When will the sixth tram depart?

_____

40. $3.65 + 20.1 + 0.197$

_____

41. Richard has 64 comic books in his collection. He has three times as many superhero comics as he has humor comics. How many superhero comic books does he have?

_____

42. Which operation is the first step to evaluate $3 \times 2^4 + 25 \div 5$?

_____

43. Write the decimal equivalent of 65%.

_____

44. How many decimal places will be in the product 6.97×8.42?

_____

45. Evaluate $42 \div d + g - 3$ for $d = 6$ and $g = 6$.

_____

46. $36 - 6^2$

_____

47. Vi spent $8.15 on Monday, $13.45 on Tuesday, $9.90 on Wednesday, and $18.65 on Thursday. What is a reasonable estimate of the amount of money he spent on these four days?

_____

48. Wally has to pack his rock collection in cases. He has 165 rocks and each case holds 12 rocks. How many cases can he fill completely?

_____

49. $11 \times 11 \times 11$

_____

50. Bill earns $12 for each lawn he mows and $8 for each garden he weeds. If he mows 6 lawns this month and weeds 3 gardens, how much will he earn?

_____

Stop

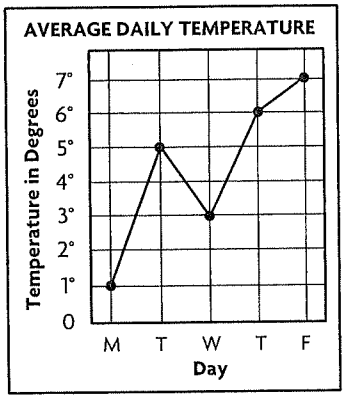
Name _____

Write the correct answer.

1. A __?__ is a method of gathering information about a group.

_____

2. The graph shows the average temperature for each day last week. What was the greatest average temperature increase between any two days?



_____

3. What type of graph would best show the number of visitors, grouped by age, to a theme park?

_____

4. What type of graph would best show the numbers of points scored by players in a basketball game?

_____

5. Rewrite the question so that it is less biased.

   Is Ms. Nathan the best teacher, or is it Mr. Gold or Mrs. Cone?

_____

_____

Use the data for 6–8. It shows the number of brothers and sisters each student in Mrs. Yokoi's class has.

0, 3, 2, 4, 0, 1, 1, 2, 5, 4, 6, 2, 3, 1, 0, 2, 5, 2, 1, 2, 0, 7, 4, 2, 1

6. Complete the tally table.

Number of Brothers and Sisters	
0	
1	
2	
3	
4	
5 or more	

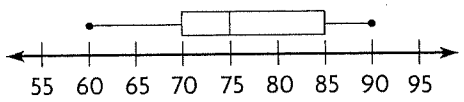
7. How many students have at least 4 brothers and sisters?

_____

8. What is the mean of the data?

_____

For 9–10, use the box-and-whisker graph.



9. What is the median?

_____

10. What is the lower extreme?

_____

Go On

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Name _____

11. What is the median price for a pair of jeans?

PRICE OF JEANS								
$11	$12	$13	$13	$15	$16	$19	$22	$24

_____

12. What is the median of the lower half of a set of data called?

_____

13. For the following set of data, what word describes the value 13?

13, 20, 21, 23, 23, 25, 26, 28

_____

14. Which type of graph would best show how the high and low scores of a soccer team relate to the median?

_____

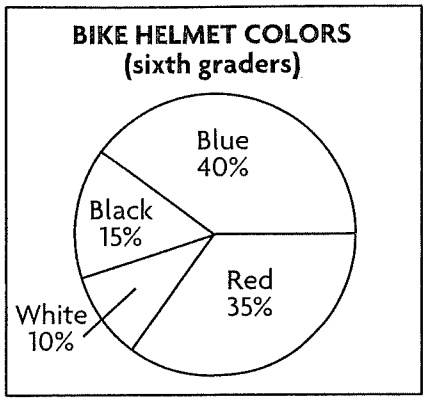
15. A random sample from one basketball team shows that the players prefer to wear two pairs of socks. Fati decides that all basketball players on the team prefer to wear two pairs of socks. Is the conclusion valid? Explain.

_____

16. Which type of graph would best show how a baby gorilla's weight changed over time?

_____

For 17–18, use the circle graph.



17. What percent of sixth graders have red bike helmets?

_____

18. Which color of helmet is the most popular?

_____

For 19–20, use the cumulative frequency table showing how people rated a new VCR.

19. Complete the table.

Rating	Frequency	Cumulative Frequency
Outstanding	3	3
Above Average	4	▪
Average	▪	12
Below Average	2	14

_____

20. How many people rated the new VCR?

_____

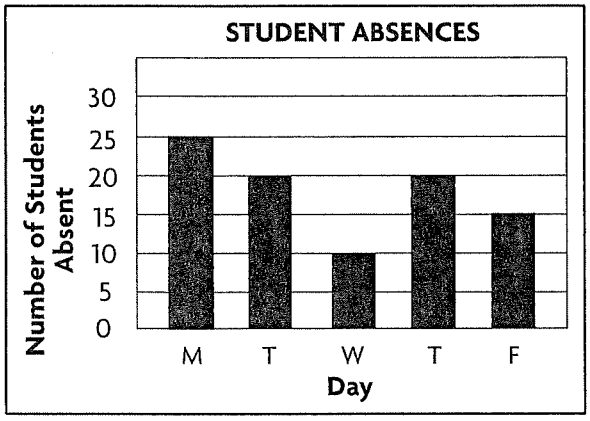
Go On

Name _____

21. A store surveyed the first 50 customers of the day. What type of sample was this?

_____

For 22–24, use the bar graph showing this week's absences at Sojourner Truth Middle School.



22. On which day were the fewest students absent?

_____

23. If next week is similar to this week, how many absences would be predicted for Friday?

_____

24. Why would it **not** be good to start the vertical scale at 5 instead of 0?

_____

25. The mean age of 8 people is 16 years. When Mrs. Hernandez's age is included, the mean age increases to 20. How old is Mrs. Hernandez?

_____

26. Andy randomly surveyed 30 children at the pet store to celebrate bird day. He concluded that children prefer birds as pets. Why is Andy's conclusion not valid?

_____

_____

27. Make a stem-and-leaf plot for the following scores.

23, 25, 29, 34, 33, 38, 42, 41, 40,

45, 49, 51, 53, 50, 50, 54, 60, 62,

70, 72, 76, 79, 76, 22, 23, 24, 45

For 28–29, use the stem-and-leaf plot you drew.

28. What is the median for the data?

_____

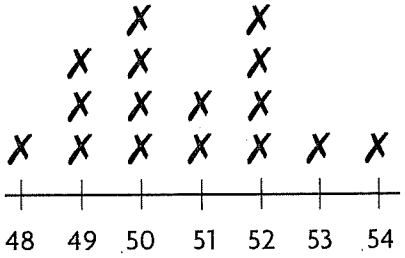
29. What are the modes for the data?

_____

Go On

Name _____

30. What are the modes for the data in the line plot?



_____

For 31–33, use the stem-and-leaf plot of test score data.

Stem	Leaves
1	0 0 1 3 3 3 4 5
2	0 2 6 6 8 9 9
3	1 2 4 5 7 7 8

31. What is the median score?

_____

32. What is the range of the scores?

_____

33. Could a histogram be used to show the same data? Explain.

_____

34. Amy scored 65, 70, 75, 80, and 85 on her first 5 math quizzes. What does she have to score on the next quiz to increase her mean score by 2 points?

_____

35. Which type of graph would best show the percent of votes all candidates in an election received?

_____

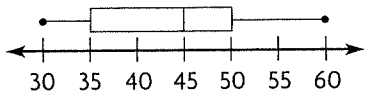
36. In the first week of soccer training, Melissa did 20 crunches. If she doubles the number of crunches each week, how many crunches will she do in the fifth week?

_____

37. Mr. Perez's savings deposits for the first 6 weeks of the year were $25, $20, $25, $20, $25, and $20. If this pattern continues, how much money will he have saved in all by the end of the 10th week?

_____

38. What is the upper quartile of the data?



_____

39. What is the range of the data?

64, 55, 72, 43, 36

_____

40. A store surveyed every tenth customer during the day. What type of sample was this?

_____

Stop

Name _____

Write the correct answer.

1. Write which of the numbers 2, 3, 4, 5, 6, 8, 9, or 10 are factors of 120.

_____

2. Chris has a small library of novels. It includes 10 mystery, 12 science fiction, 6 biography, and 2 technical novels. What fraction of Chris' collection is biography?

_____

3. Estimate. $5\frac{2}{9} + 8\frac{7}{8}$.

_____

4. $3\frac{1}{8} \times \frac{4}{5}$

_____

5. Write which of the numbers 3, 4, 5, 6, 8, 9, or 10 are factors of both 96 and 324.

_____

6. Write $\frac{17}{5}$ as a mixed number.

_____

7. Winnie spent $\frac{1}{3}$ hour showering, $\frac{1}{4}$ hour getting dressed, and $\frac{1}{2}$ hour eating breakfast. How much total time did she spend in these activities?

_____

8. Yesterday, Phillip cleaned $\frac{3}{5}$ of his room. He cleaned only $\frac{1}{3}$ that much today. What part of the room is left to clean?

_____

9. Write the first five multiples of 45.

_____

10. Write $\frac{3}{12}$ in simplest form.

_____

11. $\frac{8}{11} - \frac{2}{3}$

_____

12. $\frac{2}{7} \div \frac{7}{8}$

_____

13. Find the GCF of 32 and 56.

_____

14. Write 0.09 as a fraction.

_____

Go On

Name _____

15. About $\frac{2}{3}$ of a golf course is made up of par 4 holes. Another $\frac{1}{9}$ is made up of par 5 holes, and the rest is par 3 holes. What fraction of a golf course is made up of par 3 holes?

_____

16. $4\frac{2}{5} \times 2\frac{1}{4}$

_____

17. What is the 15th number in the sequence? 83, 80, 77, 74, 71, . . .

_____

18. $\frac{63}{9}$ is equal to what integer?

_____

19. Bill lives between Art and Carl on a straight road, $\frac{2}{5}$ mi from Art and $\frac{1}{4}$ mi from Carl. Carl lives between Bill and Don on the same road. Bill lives $\frac{5}{8}$ mi from Don. Draw a diagram to help find how far Carl lives from Don.

_____

20. Estimate. $4\frac{1}{8} \times 5\frac{7}{9}$

_____

21. Joshua swims every 2 days and Nicole swims every 3 days. They swim together on May 9. How many more times will they meet at the pool by July 4?

_____

22. Write $\frac{53}{100}$ as a percent.

_____

23. $7\frac{1}{3} + 4\frac{2}{5}$

_____

24. Estimate. $\frac{11}{12} \div \frac{7}{8}$

_____

25. Sheet metal screws are sold in boxes of 35. Washers come in packages of 10, and anchors are sold by the dozen. What is the least number of each you can buy to have an equal number of each?

_____

26. Solve for x.

$\frac{5}{9} = \frac{x}{36}$

_____

Go On

Name _____

27. Michael, Susan, and Pauline bought a new computer game by pooling their resources. Michael contributed $\frac{2}{5}$ of the money and Pauline contributed $\frac{1}{3}$. What fraction did Susan contribute?

_____

28. Sebastian worked on painting his sailboat for 9 days. He spent a total of $43\frac{1}{2}$ hours painting. If he painted the same length of time each day, how much time did he spend per day painting?

_____

29. Write the prime factorization of 756.

_____

30. Write a fraction equivalent to 0.65.

_____

31. $\frac{5}{9} - \frac{5}{18}$

_____

32. You need to cut $2\frac{3}{4}$ in. pieces of string from a larger piece which is 50 in. long. How many full pieces can you get?

_____

33. Which of the numbers 1, 39, 57, 83, 123 is prime?

_____

34. The bill received $\frac{37}{50}$ of the votes from the state senate for passage. Write a decimal that tells what part of the senate voted for the bill.

_____

35. $\frac{1}{3} + \frac{1}{4} + \frac{1}{9}$

_____

36. $4\frac{2}{5} \times 5\frac{2}{3}$

_____

37. What are the three smallest prime factors of 24,310?

_____

38. Write an equivalent fraction for $\frac{7}{9}$.

_____

Go On

Name _____

39. Arthur lives $\frac{2}{5}$ mi. north of Jeffrey. Jeffrey lives $2\frac{1}{2}$ mi. south of Jason. Chris lives $\frac{2}{3}$ mi. east of Jason. Andy lives due south of Chris and due east of Arthur. Draw a diagram to help find out how far Andy lives from Chris.

_____

40. $14\frac{2}{3} \div 4\frac{2}{5}$

_____

41. Write the prime factorization of 924.

_____

42. Solve for *c*.

$4\frac{3}{8} = \frac{c}{8}$

_____

43. Louisa walked $3\frac{1}{4}$ mile on Monday, $2\frac{4}{5}$ mile on Tuesday, and $1\frac{1}{8}$ mile today. Estimate the total distance she walked on these 3 days.

_____

44. A box of macaroni & cheese contains 14 ounces. If each serving is 3 ounces, how many servings are contained in the box?

_____

45. Tomato plants are grown 6 in a flat, and fertilizer stakes are packaged 10 in a bag. Each plant needs 3 fertilizer stakes when transplanted. What is the fewest number of flats of tomatoes needed if there are to be no tomato plants or fertilizer stakes left over?

_____

46. Write $\frac{24}{28}$ in simplest form.

_____

47. $2\frac{3}{4} + 4\frac{5}{8}$

_____

48. Solve for k.

$k \div \frac{2}{5} = 25$

_____

49. Find the LCM of 18 and 24.

_____

50. Of the total money raised for charity, the police department raised $\frac{1}{5}$, three schools each raised $\frac{1}{10}$, and five clubs each raised $\frac{1}{20}$. The fire department raised the rest of the money. What fraction of the total did the fire department raise?

_____

Stop

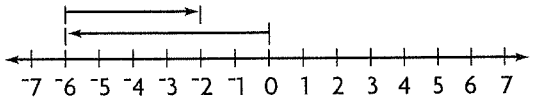
Name _____

Write the correct answer.

1. Write an integer to represent an increase in length of 21 inches.

_____

2. Write the equation that is modeled on the number line below.



_____

3. $^{-}5 \times {}^{-}7$

_____

4. Write a rational number between $4\frac{2}{3}$ and $4\frac{4}{5}$.

_____

5. $3 + {}^{-}8$

_____

6. $27 \div {}^{-}9$

_____

7. Order $5\frac{1}{6}$, 5.2, 5.15, and $5\frac{1}{8}$ from *least* to *greatest*.

_____

8. In May, the price of a kayak was $1,075. In October the price was $899. What was the price change?

_____

9. Use a property to simplify the expression. Then evaluate the expression and identify the property you used.

$25 \times 7 \times 4$

_____

10. What is the value of $|{}^{-}2.57|$?

_____

11. $32 - {}^{-}25$

_____

12. Evaluate the expression.

$(4 + {}^{-}10) \div {}^{-}2$

_____

13. Write $4\frac{4}{9}$ in the form $\frac{a}{b}$.

_____

14. Solve for x using mental math.

$x + {}^{-}7 = 15$.

_____

Go On

Name _____

15. $3 + 5 \times 7$

_____

16. Write 5.384 in the form $\frac{a}{b}$.

_____

17. A submarine dove from the surface to a level of $^{-}284$ fathoms, then rose 57 fathoms. How deep was it then?

_____

18. $^{-}8 \times 24$

_____

19. Claudia, Doria, and Emily have different interests: movies, music, and math. Claudia does not like movies, and Doria does not enjoy math. Claudia plays the oboe. What interest does each have?

_____

20. $^{-}9 + 12$

_____

21. $8 + (3 - 7)^2$

_____

22. The set of integers is made up of the positive whole numbers, their ___?___, and ___?___.

_____

23. L.J. rode his bicycle 3 mi to the movie theater, then 4 mi to a friend's house, and 5 mi back home. How far did he ride his bicycle?

_____

24. $^{-}48 \div {}^{-}8$

_____

25. The letters p, q, r, s, and t represent the numbers 3.2, $^{-}2\frac{4}{5}$, 2.94, $^{-}3\frac{7}{8}$, and $2\frac{4}{5}$, but not necessarily in that order. The value of s is greater than t but less than p. The values of q and r are opposites, and p is the greatest. Which number is represented by t?

_____

26. Solve for x.

$x - 5 = {}^{-}3$

_____

Go On

Name _____

27. $(^-3 + ^-4)^2$

_____

28. Write a rational number between $^-1\frac{5}{6}$ and $^-1\frac{3}{4}$.

_____

29. $12 - 7$

_____

30. Evaluate $k \times m$ for $k = 18$ and $m = ^-6$.

_____

31. What is the absolute value of $^-31\frac{7}{8}$?

_____

32. $^-9 + 6$

_____

33. Each week you deposit $12 of your earnings in a savings account. How much will you have deposited in this account after 3 years?

_____

34. In the 100 yard dash, the top three times were 11.4 sec, $11\frac{3}{8}$ sec, and $11\frac{4}{7}$ sec. Order these times from *least* to *greatest*.

_____

35. $^-8 + ^-14$

_____

36. Evaluate $w \div z$ for $w = ^-24$ and $z = 8$.

_____

37. Write the opposite of $1\frac{5}{7}$.

_____

38. An airplane pilot flying at 5,600 feet above sea level spots a submarine sailing beneath him at a depth of 160 feet. What is the vertical distance between the plane and the submarine?

_____

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Go On

Name _____

39. On Monday you earned $23. On Tuesday you spent $15 of your earnings. On Wednesday and Thursday you earned $14 each day, and on Friday you spent $35. Since Monday, how much do you have left?

_____

40. What integer represents a decrease of 37°F?

_____

41. Evaluate $p - q$ for $p = {}^{-}14$ and $q = 12$.

_____

42. ${}^{-}37.5 \times 0$

_____

43. a, b, c, and d represent rational numbers. c is between d and a, and c is less than b. d and c are opposites, and d is the only negative number. Which number is the least?

_____

44. Doris got on an elevator and went up 9 floors, then went down 14 floors to the second floor. On what floor did Doris start?

_____

45. If the price of gas rose $0.35 a gallon during a 5 week period, what was the average change per week?

_____

46. Write a rational number between 3.8 and $3\frac{3}{4}$.

_____

47. Evaluate ${}^{-}m + n$ for $m = {}^{-}16$ and $n = {}^{-}12$.

_____

48. Solve for p.

$p \div 5 = 15$

_____

49. Lisa, Christopher, and David belong to the karate, jogging, and swimming clubs. Each belongs to only one club. Christopher does not jog, and the swim club is all girls. Which student is in which club?

_____

50. On Sunday, Louisa earned $12 for child care, $18 planting flowers, and $6 sweeping the garage. How much did she earn in all?

_____

Stop

Name _____

Write the correct answer.

1. Write an expression to represent the product of $6n$ and $4p$.

_____

2. Write an equation for the word sentence, 15 is the quotient of 90 and a number.

_____

3. Solve for t.

$^{-}21 = \frac{t}{3}$

_____

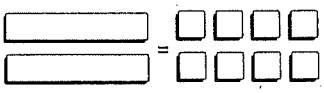
4. Evaluate $3x + 4$ for $x = 4$.

_____

5. Write and solve the equation that is modeled below.

_____

6. Write and solve the equation that is modeled below.



_____

7. $2\sqrt{36} - 15$

_____

8. Solve for x.

$x - 12 = {}^{-}7$

_____

9. Draw a model to represent and solve the equation $5x + 1 = 46$.

_____

10. Write a numerical expression for the word expression, twelve less than twice a number.

_____

11. Ari is reading a book that has 316 pages. He has read 28 pages so far. How many more pages does he have to read to finish the book? Write an equation to model this situation, and solve.

_____

12. Convert 86°F to degrees Celsius. Use the formula $C = \frac{5}{9} \times (F - 32)$.

_____

13. Evaluate $5a^2 - 8$ for $a = 3$.

_____

14. Draw a model to represent and solve the equation $5 + n = 8$.

_____

Go On

Name _____

15. Rod bought 3 children's tickets to the movies. He also bought one adult ticket for $8. The total cost for the tickets was $23. How much is a children's ticket for the movies?

_____

16. The recreation department needs to put new fencing around 2 of the town's pools. Both pool areas are square. One has an area of 625 sq ft and the other has an area of 400 sq ft. How much fencing is needed?

_____

17. Solve for x. $2\frac{7}{8} + x = 8$

_____

18. Solve for x. $^{-}15x = {}^{-}90$

_____

19. Scott's math average is 87. Each extra credit paper he does earns him e points toward his average. Each missed homework assignment costs him m points. Write an expression to tell what his average is after he has done one extra credit page, but has missed one homework assignment.

_____

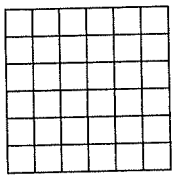
20. Write an equation for the word sentence: 63 is the product of 7 and a number.

_____

21. Casey lives 330 miles from her grandmother. If she drives an average of 55 miles per hour , how long will it take her to get to her grandmother's house? Use the formula $d = rt$.

_____

22. Write an expression that you could use the diagram to evaluate.



_____

23. What number increased by 4 equals $^{-}2$?

_____

24. Solve for x. $\frac{x}{^{-}5} = 7$

_____

25. A bank charges a fee of $3 per month for a checking account. In addition they charge d dollars for each check written plus x dollars for each returned check. Write an expression that represents the cost of a checking account for one month after writing 6 checks and having 2 checks returned.

_____

26. Solve for x. $54 = x - 22$

_____

Go On

Name _____

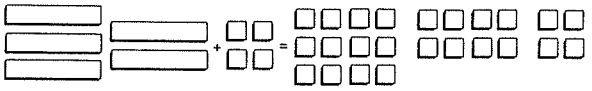
27. Corey bought 4 video games and 2 new controllers for a total of $210 before tax. If the games cost $40 each, how much did each of the controllers cost?

_____

28. Write an expression to represent 15 decreased by m.

_____

29. Write and solve the equation that is modeled below.



_____

30. Use the formula $d = rt$ to find r for $d = 570$ and $t = 15$.

_____

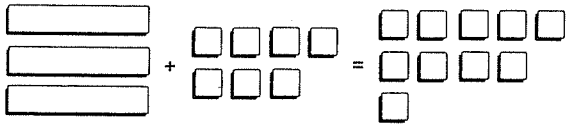
31. Find $3 \times \frac{\sqrt{81}}{\sqrt{9}}$.

_____

32. Write an equation to represent the word sentence, 46 is 5 less than a number.

_____

33. Write and solve the equation shown by the model.



_____

34. Evaluate $2x + \frac{5y}{3}$ for $x = 4$ and $y = 3$.

_____

35. For lunch Moira bought a sandwich for $3.75, a drink for $1.50, and dessert for $2.25. She paid with a $20 bill. How much change did she receive?

_____

36. Convert $^{-}35°C$ into degrees Fahrenheit. Use the formula

$F = (\frac{9}{5} \times C) + 32$.

_____

37. How many tiles are needed to make an 8×8 array?

_____

38. Mr. Saunders has collected 12 permission slips from the students in his class. He needs to collect 16 more. How many students are in his class?

_____

Go On

Name _____

39. Reba scored 21 points in a basketball game. Field goals are 2 points each, and free throws are 1 point each. If she made 7 of her points from free throws, and the rest were from field goals, how many field goals did Reba make?

_____

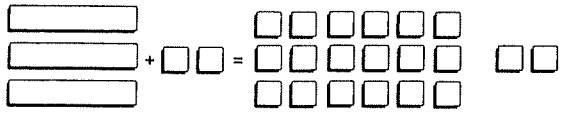
40. Find $\sqrt{121} + \sqrt{81} - 4^2$.

_____

41. Write an equation to represent the word sentence, 8 times a number is 40.

_____

42. Write and solve the equation that is modeled below.

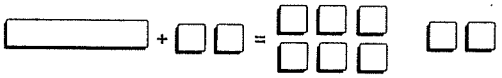


_____

43. Two square arrays have a total of 45 squares. What size are the arrays?

_____

44. Write and solve the equation represented by the model.



_____

45. Draw a model to represent and solve the equation $3x + 4 = 13$.

_____

46. Evaluate $15 + 3n + n^2$ for $n = {}^{-}5$.

_____

47. Solve for x. $x - 1\frac{1}{2} = 10$.

_____

48. Evan uses his allowance to buy school lunch 5 days per week. Lunch is $2.50 per day. After buying lunch, he has $5 left from his allowance each week. How much is Evan's weekly allowance?

_____

49. Megan uses 2 eggs for each batch of cookies. She made 3 batches of cookies and now has 5 eggs left. How many eggs did she start out with?

_____

50. Max bought 32 quarts of fruit punch for his party. So far his guests drank 14 quarts of punch. How many quarts does he have left?

_____

Stop

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Name _____

Write the correct answer.

1. An angle is formed by two rays with a common endpoint called a(n) __?__.

_____

2. A polygon with all sides equal and all angles equal is called __?__.

_____

3. A pattern that can be folded to form a solid figure is called a(n) __?__.

_____

4. Identify the geometric figure.

_____

5. The figure below is an example of a(n) __?__ triangle.

_____

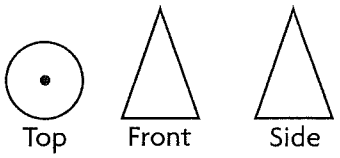
6. A prism has a pentagonal base. How many edges does it have?

_____

7. A line segment with endpoints on a circle is called a(n) __?__.

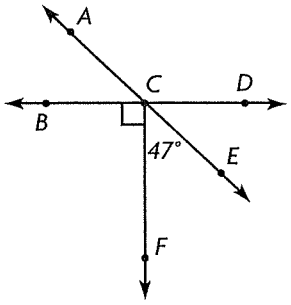
_____

8. Name the solid that has these views.



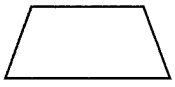
_____

9. Find the measure of $\angle ACB$.



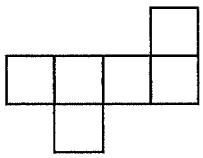
_____

10. Give the most exact name for the figure.



_____

11. Can this arrangement of squares be folded to form a cube? If so, how many vertices will it have?



_____

12. Two angles with measures that have a sum of 90° are __?__.

_____

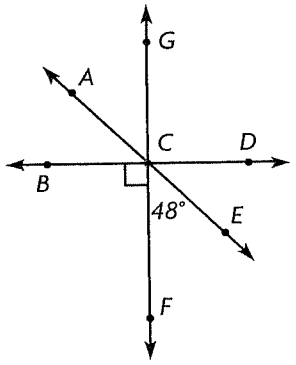
Go On

Name _____

13. In quadrilateral $ABCD$, $\angle A$ and $\angle C$ measure 110°, and $\angle B$ measures 70°. Classify the quadrilateral.

_____

For 14–16, use the figure to find the measure of each angle.



14. $\angle ACG$

_____

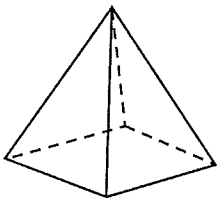
15. $\angle DCE$

_____

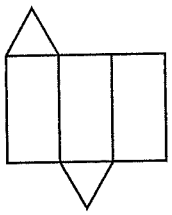
16. $\angle ACB$

_____

17. Draw the top, front, and side views of this solid.

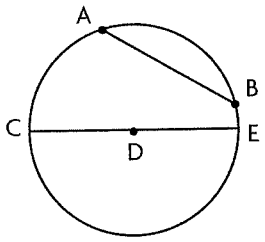


18. Will this net fold to form a polyhedron? If so, what kind?



_____

For 19–21, use the circle.



19. Name a radius.

_____

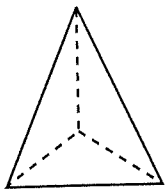
20. Name a chord.

_____

21. Name a diameter.

_____

22. Identify the figure.



_____

Go On

Name _____

23. How many non-collinear points are needed to define a plane?

_____

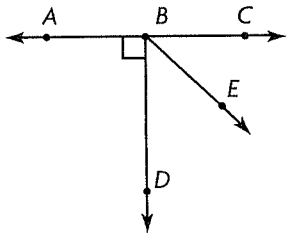
24. What is the measure of each angle in a regular pentagon?

_____

25. A prism has a 6-sided base. How many edges and faces does it have?

_____

26. In the figure, $\angle CBE$ and $\angle EBD$ are __?__ angles.



_____

27. Angles that share a common side and vertex are called __?__ angles.

_____

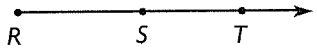
28. Two angles in a triangle measure 48° and 84°. Classify the triangle.

_____

29. How many vertices are there in a pyramid with a base of 12 sides?

_____

30. What is another name for ray RT?



_____

31. A solid figure with 6 rectangular sides and 2 hexagonal bases is called a(n) __?__.

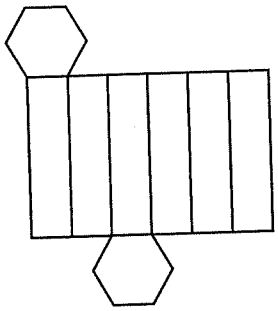
_____

32. If a quadrilateral has four congruent sides and four congruent angles, then it must be a(n) __?__.

_____

Name _____

33. Can this net be folded to form a solid? If so, what kind?



_____

34. $\angle 1$ and $\angle 2$ are supplementary angles. $\angle 2$ and $\angle 3$ are complementary. $\angle 3$ measures 38°. What is the measure of $\angle 1$?

_____

35. A regular polygon has 10 sides. What is the measure of each interior angle?

_____

36. How many edges does a pentagonal prism have?

_____

37. ___?___ angles are opposite angles formed when two lines intersect.

_____

38. A prism has 27 edges. How many vertices does it have?

_____

39. One angle formed by two intersecting lines measures 70°. What are the measures of the other three angles?

_____

40. If the number of sides of the base of a prism is increased by 1, how many more vertices will the new prism have?

_____

Stop

Name _____

Write the correct answer.

1. An item costs $26.50. The sales tax rate is 8%. What is the sales tax?

_____

2. Find the unit rate.

   392 miles on 14 gallons of gas

_____

3. A rectangle measures 10 in. wide and 24 in. long. A similar rectangle has a width of 17.5 in. What is its length?

_____

4. In a group of 25 students, 9 are 7 years old, 11 are 8 years old, and 5 are 9 years old. A student is selected at random. What is the probability that he or she is 8 years old?

_____

5. For a class play, 4 students are auditioning for the lead actor, 5 for the lead actress, and 3 for the director. How many different choices of one actor, one actress, and one director are possible?

_____

6. Write $\frac{5}{8}$ as a percent.

_____

7. If the outcome of the second event does not depend on the outcome of the first event, the events are called __?__.

_____

8. Maggie tossed a thumbtack 50 times and the point landed up 30 times. Based on these data, how many times can she expect the thumbtack to land with the point up in 75 tosses?

_____

9. When you roll 3 number cubes, each labeled 1 to 6, how many outcomes are possible?

_____

10. Maureen puts $500 in a savings account with a yearly simple interest rate of 3.5%. How much will be in her account after 4 years?

_____

11. The scale for a map is 1 in. = 150 mi. What is the actual distance between two towns that are $3\frac{1}{2}$ in. apart on the map?

_____

12. The names of the days of the week are on slips of paper in a bowl. One slip is randomly drawn. Find P(day begins with the letter T).

_____

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Go On

Name _____

For 13–15, use the following information.

Six hundred members of a community organization were asked which fund-raiser they would prefer. Here are the results.

rummage sale	180
bake sale	105
magazine drive	130
walk-a-thon	185

13. What is the probability that a randomly selected member will choose the bake sale?

_____

14. What is the probability that a randomly selected member will choose the rummage sale or the walk-a-thon?

_____

15. Suppose an additional 100 members are surveyed. What is a reasonable prediction of the number of those members who will prefer a magazine drive?

_____

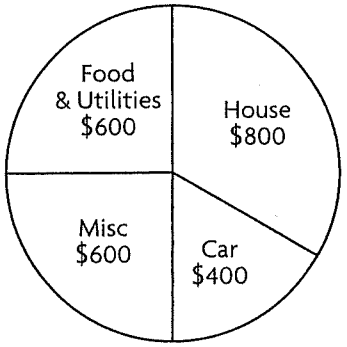
16. Louise needs 1 cup of flour to make 24 pancakes. How many cups of flour does she need to make 40 pancakes?

_____

17. What is the total cost of a $45 skirt on sale for 20% off with 6% sales tax added on?

_____

For 18–20, use the circle graph. The graph shows the amount of money spent by a family.



18. House payment expenses made up what percent of the money spent?

_____

19. What percent of the money spent is for food and utilities, and miscellaneous?

_____

20. Suppose the family increases its car payment by $100. What percent of expenditures would the car payment be?

_____

21. If Miguel can go 12 blocks in 8 min on his in-line skates, how many blocks would you expect him to be able to go in 6 min?

_____

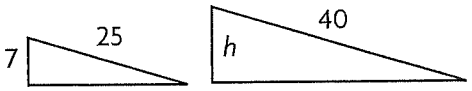
22. Kiwi fruit are on sale at 4 for $0.88. Find the cost of 7 kiwi fruit.

_____

Go On

Name _____

23. The triangles are similar. Find the unknown length.



_____

For 24–25, use the following information.

A bag is filled with marbles of 4 different colors. Willie randomly selected 20 marbles from the bag and recorded the color of each marble.

BLUE	RED	GREEN	YELLOW
7	4	3	6

24. Based on his results, how many yellow marbles can Willie expect in his next 30 selections?

_____

25. Based on his results, how many red marbles can Willie expect in his next 45 selections?

_____

26. A scale drawing for a sailboat uses a scale of 2 in. = 15 ft. The length of the sailboat on the drawing is 11 in. How long is the actual sailboat?

_____

27. A hair stylist has a choice of 3 hair lengths, 5 hair colors, and 2 hair types. How many different styles based on 1 length, 1 color, and 1 type can she make?

_____

For 28–29, use the following information. Write whether there is *too much*, *too little*, or the *right amount* of information to solve the problem. Solve, if possible.

A spinner has 12 equal sections. There are 4 blue sections, 5 yellow sections, 2 green sections and 1 red section. The red section is between the two green sections.

28. What is the probability that the spinner will land on purple or blue?

_____

29. What is the probability that the spinner will **not** land on blue?

_____

30. Dana travels 1,200 miles in 5 days. If she continues at this rate, how far will she travel in 8 days?

_____

Go On

Name _____

For 31–32, use the following information.

A six-sided cube with 1 red side, 2 green sides, and 3 yellow sides is tossed, and the color showing is noted.

31. Express P(red or yellow) as a fraction.

_____

32. Find P(not yellow).

_____

33. To make 5 dozen donuts, 4 cups of milk are used. How many cups of milk are needed to make 96 donuts?

_____

34. What is 46% of 80?

_____

35. Joy wants to leave a 15% tip on a restaurant bill of $42.25. What is a reasonable estimate for a 15% tip?

_____

36. There are 8 motorcycles and 32 cars in the parking lot. What is the ratio of motorcycles to cars written as a percent?

_____

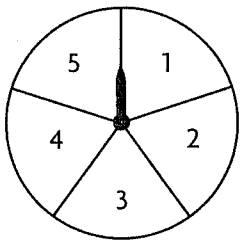
37. Write 72% both as a decimal and as a fraction in simplest form.

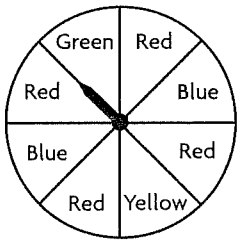
_____

38. What is 305% of 200?

_____

For 39–40, use the spinners shown below.





39. What is the probability of the pointers landing on 4 and red?

_____

40. What is the probability the pointers landing on an odd number and a color that is **not** blue?

_____

Stop

Name _____

Write the correct answer.

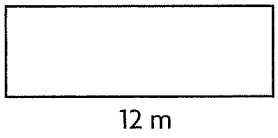
1. What is the most appropriate metric unit of measurement for the amount of soda a can holds?

_____

2. A line segment that passes through the center of a circle and has both endpoints on the circle is called a ___?___ .

_____

3. Find the area.



_____

4. The sum of the areas of the faces of a solid figure is the ___?___ .

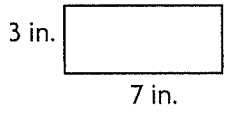
_____

5. Use a proportion to convert to the given unit.

3.8 L = ▩ mL

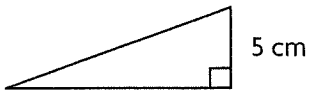
_____

6. Find the perimeter.



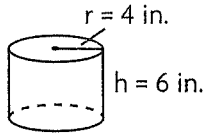
_____

7. Find the area.



_____

8. Find the volume of the cylinder. Use 3.14 for π.



_____

9. Use a proportion to convert $4\frac{1}{2}$ yd to inches.

_____

10. Find the diameter of a circle with a circumference of 50.24 m. Use 3.14 for π.

_____

11. Find the area of a circle with a radius of 8 in. Use 3.14 for π.

_____

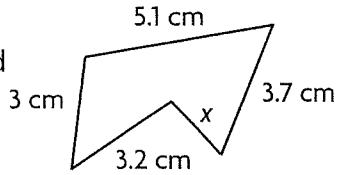
12. A rectangular box has sides of 3, 6, and 7 inches. What is the volume?

_____

13. To set up her stereo Pat needs 4 pieces of speaker wire, each $5\frac{1}{2}$ ft long. Pat has 8 yd of wire. Does she have enough? Does she need an exact measurement or an estimate?

_____

14. The perimeter is 16.9 cm. Find the unknown length.

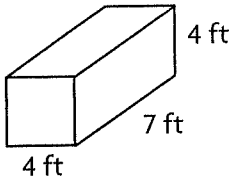


_____

Go On

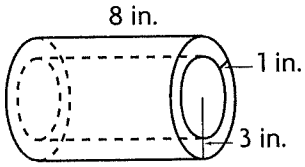
Name _____

15. Find the surface area of the box.



_____

16. Find the volume of the inside cylinder to the nearest whole number. Use 3.14 for π.



_____

17. What is the most common customary measurement for an individual's weight?

_____

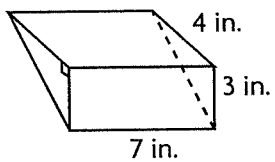
18. Cinzia wants to put a decorative fence around a garden that is 6 ft × 12 ft. How many feet of fencing will she need?

_____

19. Chris needs to wrap a rectangular box with dimensions 4 in. × 5 in. × 13 in. How many square inches of wrapping paper will he use if there is no overlap?

_____

20. Find the volume.

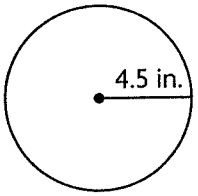


_____

21. Faye is going to put fringe around several pillows. Which customary measurement will give her a more precise measurement, inches or feet?

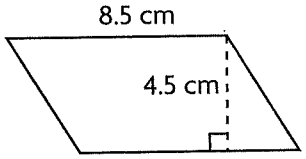
_____

22. Find the circumference of the circle. Use 3.14 for π.



_____

23. Find the area.



_____

24. The radius of a circle is tripled. How does this affect its area?

_____

25. A tree in Kim's back yard is 22 ft tall. What is its height in meters? (1 in. ≈ 2.54 cm)

_____

26. A regular pentagon has sides that measure 18 cm. Find the perimeter of the pentagon.

_____

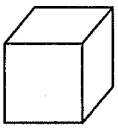
Go On

Name _____

27. A circle has a circumference of 43.96 ft. What is its diameter? Use 3.14 for the value of π.

_____

28. Find the volume.



_____

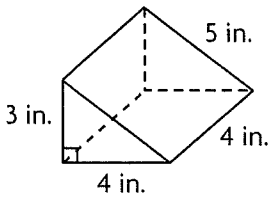
29. Lisa has $50 and wants to purchase a game for $24.95, 2 packs of batteries at $2.59 each, and 3 rolls of film at $3.39 each. Does she have enough money? Does she need an estimate or exact value?

_____

30. Stephen wants to fence in his backyard, which measures 15 yd × 25 yd. He will use his house as one of the short sides. How much fencing does he need?

_____

31. Find the surface area.



_____

32. What is the volume of a pyramid with a height of 5 m and a base area of 36 m^2?

_____

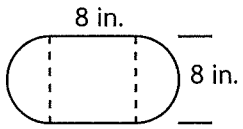
33. What metric unit of measurement is appropriate to measure the length of a paper clip?

_____

34. A square courtyard has a perimeter of 120 yd. How long is each side of the courtyard?

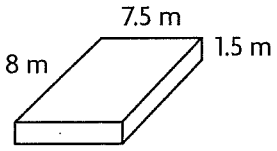
_____

35. Find the area of the figure shown below. Use 3.14 for π.



_____

36. Find the volume.



_____

37. Use a proportion to convert to the given unit. (1 mi ≈ 1.61 km)

203 mi ≈ ■ km

_____

38. A circular parachute has an 18 ft diameter. What is its circumference? (Use 3.14 for π.)

_____

Go On

Name _____

39. A pyramid has a square base with sides that measure 6 in. The height of the triangular faces is 12 in. Find the surface area of the pyramid.

_____

40. What is the volume of a barrel that has a diameter of 20 in. and a height of 36 in.? Use 3.14 for π.

_____

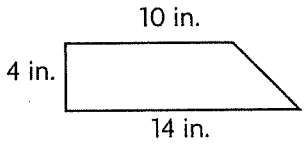
41. Ms. Catalanello's car used 120 gallons of gas last month. Convert this into liters. (1 gal $\approx$ 3.79 L)

_____

42. The shorter sides of a rectangle are 14 m long. The perimeter is 100 m. How long are the longer sides?

_____

43. Find the area.



_____

44. The length of a box is tripled, but the width and height remain the same. What happens to the volume?

_____

45. André needs to cut 38 in. of tubing for one science project, 18 in. for another, and 155 in. for a third. He has $5\frac{1}{2}$ yd of tubing. Does he have enough? Does he need an exact answer or an estimate?

_____

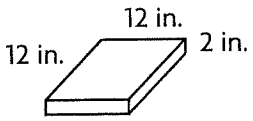
46. The radius of a circle is $5\frac{3}{5}$ in. What is its circumference? (Use $\frac{22}{7}$ for π.)

_____

47. Pauline cut 3 fabric circles with radii of 34 cm, 54 cm, and 84 cm. Find the total area of the three fabric cirles to the nearest hundred centimeters. (Use 3.14 for π.)

_____

48. Find the volume.



_____

49. Melanie is expecting to complete the New York City Marathon in about 4 hours. What customary unit of measurement is most appropriate to measure the distance of the run?

_____

50. The distance around a circle is called the ___?___ .

_____

Stop

Name _____

Write the correct answer.

1. Describe how to locate the point $(^{-}4, 5)$ starting at the origin.

_____

2. What is the rule for the sequence?

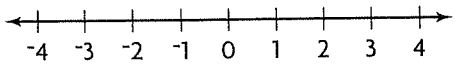
   24, 6, 1.5, 0.375, ...

_____

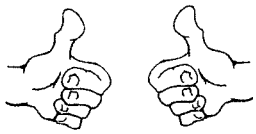
3. A repeating arrangement of shapes that completely covers a plane with no overlaps is called a ___?___ .

_____

4. Graph the solution of the inequality $x \leq 2$.



5. Which word describes the transformation that moves the first figure to the second?



_____

6. Solve the inequality. $x + 4 > 6$

_____

7. Write an equation that relates c to d.

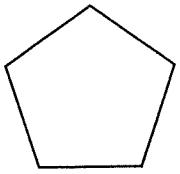
c	1	2	3	4
d	3	6	9	12

_____

8. Bennett wants to make a walkway using a shape that will tessellate. Name a regular polygon that he should not choose.

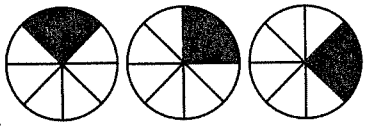
_____

9. How many lines of symmetry does the figure have?



_____

10. What are the next two figures in the pattern?



_____

© Harcourt

Go On

Name _____

11. At 5 P.M., the temperature was 64°F. At 7 P.M., the temperature was 61°F. At 9 P.M., the temperature was 58°F. If this pattern continues, what will the temperature be at 1 A.M.?

_____

12. Write an equation to relate x to y.

x	0	2	4	6	8
y	0	14	28	42	56

_____

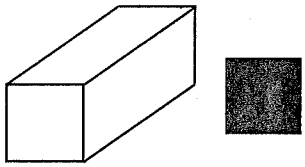
13. Triangle QRS has coordinates $Q(1,0)$, $R(1,{}^{-}2)$, and $S(5,{}^{-}1)$. It is translated 3 units up and 1 unit to the left. What are the new coordinates?

_____

14. Allison's Nursery sold 30 plants the first week, 44 the second week, and 58 the third week. If this pattern continues, how many plants will it sell the eighth week?

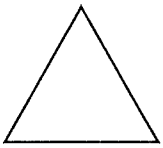
_____

15. How many ways can you place the solid figure on the black plane figure?



_____

16. Does the figure have rotational symmetry? If so, identify the symmetry as a fraction of a turn and in degrees.



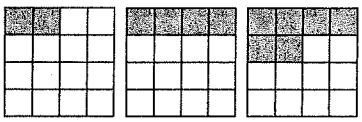
_____

17. What are the next three terms in the sequence?

64, ${}^{-}32$, 16, . . .

_____

18. How many squares are shaded in the seventh figure in the following pattern?



_____

Go On

Name _____

27. Five layers of boxes are stacked on a shelf 10 cm from the floor. Each box is 16 cm tall. How far from the floor is the top of the highest layer?

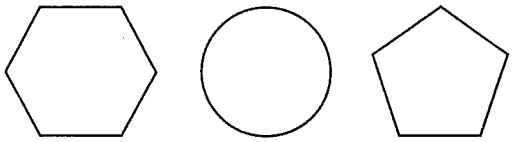
_____

28. Write an equation that represents the function.

x	$^-6$	$^-3$	0	3	6
y	$^-2$	1	4	7	10

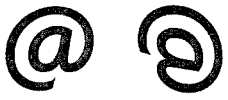
_____

29. Identify which of the figures can be used to form a tessellation.



_____

30. What transformation moves the first figure to the second?



_____

For questions 31–32, use the table below which shows how the length, l, of a rectangle is related to its width, w.

w	1	2	3	4
l	4	6	8	10

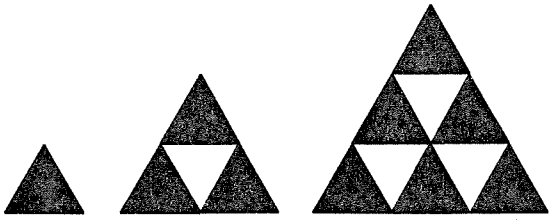
31. Which equation relates l to w?

_____

32. If the width of the rectangle is 12 m, how long is the rectangle?

_____

33. Examine the following pattern. How many small black triangles are in the sixth figure?



_____

Stop

Name _____

For questions 19–21, use the table below.

x	$^-2$	$^-1$	0	1	2
y	$^-7$	$^-4$	$^-1$	2	5

19. List the ordered pairs from the table.

_____

20. Write an equation that relates x to y.

_____

21. The points in the table are rotated 180° clockwise around the origin. What are the coordinates of the first point in the table after the rotation?

_____

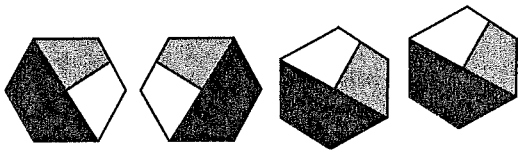
22. A set of terms that follows a pattern from one term to the next is called a ___?___ .

_____

23. Write three symbols that show an inequality.

_____

24. What moves were made to transform each figure into its next position?



_____

25. The table shows the number of cups of apple cider, c, needed per gallon of fruit punch, p. Write an equation relating p and c.

p	1	2	3	4
c	4	8	12	16

_____

26. Chris jogged 1.3 miles the first week, 1.7 miles the second week, and 2.1 miles the third week. If this pattern continues, how many miles will he jog the tenth week?

_____

Go On

SIXTH GRADE SUMMER PACKET

1. Underestimation
2. base
3. 0.005
4. 19
5. 5,000
6. 13
7. 3.474, 3.471, 3.447, 3.417
8. 7620.624
9. 3750
10. 1024
11. 3.82
12. 42,336
13. 60
14. ~~92~~
15. 0.880, 0.808, 0.804
16. 100
17. 15
18. 3.25 in
19. 54%
20. $1.47
21. 12
22. 23
23. 0.4, 40%
24. 11.2 gallons
25. 60
26. 216
27. vault
28. $47.04
29. 368, 379
30. 60
31. 10,000
32. 80.18
33. 19
34. Susan, David, Gary, Walter
35. 0.02
36. ~~11~~ 18 rows
37. 40
38. 50
39. ~~9:04~~ 9:04 AM
40. 23.947
41. 48
42. Exponents
43. 0.65
44. four
45. 10
46. 0
47. $50
48. 13 cases
49. 1331
50. $96

1. sample
2. 4°F
3. Bar graph
4. Bar graph
5. Who is the best trader, Ms. Nathan, Mr. Gold, or Mr. Cone?
6. # of Brothers & Sisters

0	IIII
1	IIII
2	~~IIII~~ II
3	II
4	III
5+	IIII

7. 7
8. ~~28~~ 24
9. 75
10. 60
11. ~~$15~~ $15
12. lower quartile
13. lower extreme
14. box-and-whisker
15. No, because the sample is only for one team.
16. line/plot graph
17. 35%
18. Blue
19. Above Avg Cumulative Freq: 7
    Avg. Freq.: 5
20. 14
21. convenience sample
22. Wednesday
23. 15
24. Because then the graph wouldn't be able to represent 0-4
25. 52 years
26. He surveyed on bird day, so the children had a bias.
27.

2	2, 3, 3, 4, 5, 9
3	3, 4, 8
4	0, 1, 2, 5, 5, 9
5	0, 0, 1, 3
6	0, 2
7	0, 2, 6, 6, 9

28. 45
29. 23, 45, 50, 76

(30) 50, 52

A (31) 23.77

A (32) 10 - 38

(33) No, there are no people groups.

(34) 87

(35) Pie graph

(36) 320

(37) 225

(38) 50

A (39) 36 - 72

(40)

(1) 2, 3, 4, 5, 6, 10

(2) $\frac{1}{5}$

(3) 14

(4) $2\frac{1}{2}$

A (5) 3, 4, 6,

(6) $3\frac{2}{5}$

(7) 1 hour 5 min

(8) $\frac{1}{5}$

(9) 45, 90, 135, 180, 225

(10) $\frac{1}{4}$

(11) $\frac{2}{33}$

(12) $\frac{1}{4}$

A (13) 9

(14) $\frac{9}{100}$

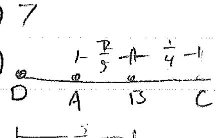
(15) $\frac{2}{9}$

(16) $9\frac{9}{10}$

(17) 41

(18) 7

(19)



(20) $23\frac{5}{6}$

(21) 4 times

(22) 53%

A (23) $\frac{176}{15}$

(24) $1\frac{1}{21}$

(25) 2 boxes of screws

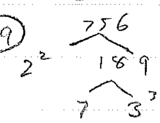
7 packs of washers

(26) $x = 20$

(27) $\frac{4}{15}$

(28) $4\frac{5}{6}$ hours

(29)



(30) $\frac{13}{20}$

(31) $\frac{5}{18}$

(32) 18 pieces

(33) 83

(34) 74

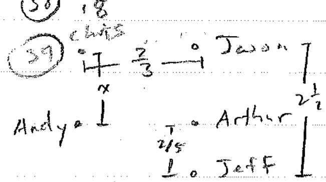
(35) $\frac{25}{36}$

(36) $24\frac{14}{15}$

(37) 2, 5, 11

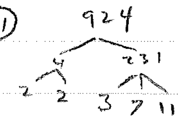
(38) $\frac{14}{18}$

(39)



(40) $3\frac{1}{3}$

(41)



(42) $c = 35$

(43) 7 miles

(44) 4 servings

(45) 5 flats

(46) $\frac{6}{7}$

(47) $7\frac{3}{8}$

(48) $k = 10$

(49) 72

(50) $\frac{13}{20}$

(1) +21

(2) 0 - 6 + 4

(3) 35

(4) 4.7 $(4.\overline{66} < x < 4.8)$

(5) -5

(6) -3

(7) $5\frac{1}{8}$, 5.15, $5\frac{1}{6}$, 5.2

A (8) $176

(9) 25 × 28, associative

= 700

(10) 2.57

(11) 57

(12) 3

(13) $\frac{40}{9}$

(14) $x = 22$

(15) 36

(16) $\frac{673}{125}$

(17) -227

(18) -192

(19) Claudia : Music

Doria : movies

Emily : math

(20) 3

(21) 24

(22) opposites, zero

(23) 12 mi

(24) 6

(25) $t = -3\frac{7}{8}$

(26) $x = 2$

(27) 49

(28) $-1\frac{9}{12}$

(29) 5

(30) -108

(31) $31\frac{7}{8}$

(32) -3

(33) [illegible]

(34) $11\frac{3}{8}$, 11.4, $11\frac{4}{7}$

(35) -22

(36) -3

(37) $-1\frac{5}{7}$

(38) 5,760 ft

(39) $1

(40) -37

(41) -26

(42) 0

(43) d

(44) [illegible] 7th floor

(45) $0.07/week

(46) [illegible] 3.76

(47) 4

(48) [illegible] $75

(49) Lisa: swimming
Chris: karate
David: Jogging

(50) $36

(1) 24mp

(2) $15 = 90 \div x$

(3) $t = -63$

(4) 16

(5) $x + 2 = 5$
$x = 3$

(6) $2y = 8$
$y = 4$

(7) -3

(8) $x = 5$

(9) $x = 9$

(10) [illegible] $2x - 12$

(11) $316 - 28 = 288$

(12) 30°C

(13) 37

(14) $n = 3$

(15) $5

(16) [illegible] 93 ft

(17) $x = 5\frac{1}{8}$

(18) $x = 6$

(19) 87 te - [illegible]

(20) $63 = 7x$

(21) 6 hours

(22) 6×6, 6^2

(23) -6

(24) $x = -35$

(25) $3 - 6d + 2x$

(26) $x = 76$

(27) $25

(28) 15 - m

(29) $5x + 4 = 74$
$x = 4$

(30) $r = 38$

(31) 9

(32) $46 = x - 5$

(33) $3x + 7 = 10$
$x = 1$

(34) 13

(35) $12.50

(36) -31°F

(37) 64

(38) 28

(39) 7

(40) 4

(41) $8 \cdot x = 40$

(42) $3x + 2 = 3(6) + 2$
$x = 6$

(43) 9 and 36

(44) $x + 2 = 8$
$x = 6$

(45) $x = 3$

(46) 25

(47) $11\frac{1}{2}$

(48) $17.50

(49) 11 eggs

(50) 18 quarters

(1) vertex

(2) regular

(3) not

(4) line

(5) isosceles

(6) 15 edges

(7) secant

(8) cone

(9) 43°

(10) trapezoid

(11) Yes, 8

(12) complementary

(13) parallelogram

(14) 48°

(15) 42 -

(16) 42°

(17) Lap [rectangle]
front + side [triangle]

(18) Yes, triangular prism

(19) $\overline{CD}$, $\overline{DE}$

(20) $\overline{AB}$

(21) $\overline{CE}$

(22) triangular pyramid

(23) 3

(24) 108°

(25) 18 edges, 8 faces

(26) complementary

(27) consecutive

(28) isosceles

(29) 13

(30) [illegible] triangular

(31) hexagonal prism

(32) square

(33) Yes, hexagonal prism

(34) 178°

(35) 144°

(36) 15

(37) vertical

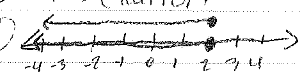
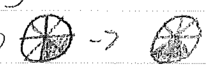
(38) 18

(39) 70°, 110°, 110°
(40) ~~12~~ 40
(1) $2.12
(2) miles per gallon
(3) 42 in.
(4) $\frac{11}{25}$, 44%
(5) 60
(6) 62.5%
(7) independent
(8) 45 times
(9) 216
(10) ~~$5~~ 570
(11) 525 mi
(12) $\frac{2}{7}$
(13) $\frac{7}{40}$ = 17.5%
(14) $\frac{73}{120}$: 60.8%
(15) 22
(16) $\frac{5}{3}$ cups
(17) $38.16
(18) 33.33%
(19) 50%
(20) 20%
(21) 9 blocks
(22) $1.59
(23) 11.2
(24) 9
(25) 9
(26) 82.5 ft
(27) 30
(28) too little
(29) too much
$\frac{2}{3}$.

(30) 1,920 miles
(31) $\frac{2}{3}$
(32) $\frac{1}{2}$
(33) 6.4 cups
(34) 36.8
(35) ~~11~~ 6.5
(36) 0.25
(37) 0.72, $\frac{18}{25}$
(38) 610
(39) $\frac{1}{10}$
(40) $\frac{9}{20}$

(1) mL
(2) diameter
(3) 48 m^2
(4) surface area
(5) 3800
(6) 20 in.
(7) 35 cm^2
(8) 301.44 $in.^2$
(9) 162 in.
(10) 16 m
(11) 200.96 $in.^2$
(12) 176 in^2
(13) Yes, exact
(14) 1.9 cm
(15) 144 ft^2
(16) 100 in^3.
(17) ~~pounds~~ kilos
(18) 36 ft
(19) 274 in^2
(20) 42 in^3

(21) inches
(22) 28.26 in
(23) 38.25 cm^2
(24) multiplied by 9
(25) 6.7 m
(26) 90 cm
(27) ~~19~~ 12.61 ft
(28) 216 in^3
(29) Yes, exact
(30) 65 yd.
(31) 60 in^2
(32) 60 m^2
(33) centimeter
(34) 30 yd.
(35) ~~11424~~ 26496 in^2
(36) 90 m^3
(37) 326.83 km
(38) 56.52 ft
(39) 180 in^2
(40) 11304 in^3
(41) 454.8 L
(42) 36 m
(43) 48 in^2
(44) × 3
(45) No, exact
(46) ~~$\frac{493}{24}$~~ $\frac{196}{5}$ in
(47) 34941.92 cm^2
(48) 288 in^3
(49) miles
(50) circumference

(1) left 4, up 5
(2) Divide by 4
(3) tessellation
(4) 
(5) Reflection
(6) x > 2
(7) $c = \frac{d}{3}$, 3c = d
(8) Heptagon
(9) 5
(10) → 
(11) 53°F
(12) 7x = y
(13) Q(0,3) R(0,1) S(4,1)
(14) 128 plants
(15) 2 ways
(16) Yes, $\frac{1}{3}$ turn or 120°
(17) −8, 4, −2
(18) 14 squares
(19) (−2,−7), (−1,−4), (0,−1), (1,2), (2,5)
(20) y = 3x − 1
(21) (2, 7)
(22) Series
(23) >, <, ≥
(24) reflection, rotation, translation
(25) p = 4c
(26) 4.9 miles
(27) 90 cm
(28) y = x + 4
(29) Hexagon
(30) Rotation
(31) l = 2w + 2
(32) l = 26
(33) ~~28~~ 21