

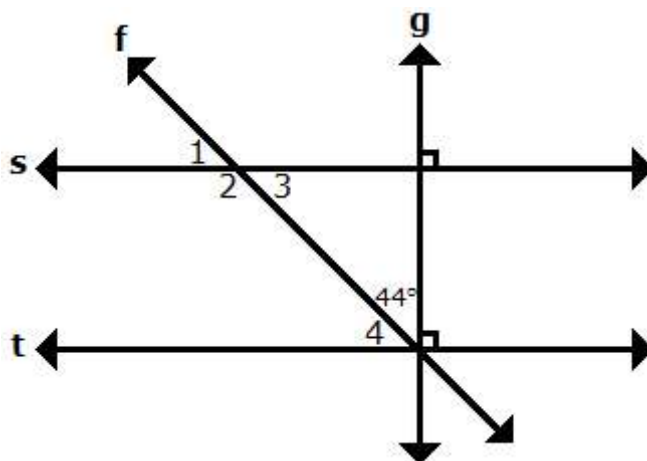
7th Grade Math Summer Break Assignment

Name: _____

Date: _____

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1. Parallel lines s and t are intersected by transversal lines f and g , as shown in the figure below. What is the measure of angle 2?



- A. 44°
- B. 136°
- C. 134°
- D. 46°

2. Taryn is hosting a party at a restaurant. The restaurant is charging her \$150 to rent the space and \$15 per guest. If Taryn wants to spend less than \$525, which inequality could be used to solve for x , the number of guests Taryn can invite?

- A. $\$15x < \525
 - B. $\$15x + \$150 < \$525$
 - C. $\$15x - \$150 < \$525$
 - D. $\$15x < \150
-

3. To get ready for the daily lunch rush, a deli prepared 30 salads topped with croutons. The manager randomly selected 5 of the salads and counted the number of croutons on each salad. The results are shown in the table below.

Sample of Salads	
Salad	Number of Croutons
A	11
B	16
C	11
D	12
E	15

Assuming the sample was representative of all the prepared salads, what was the mean number of croutons per salad?

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

4. The base of a shipping drum is in the shape of a circle with a diameter of 20 inches. Which of the following is closest to the circumference of the base of the shipping drum? (Use 3.14 for π .)

- A. 314 inches
 - B. 31.4 inches
 - C. 62.8 inches
 - D. 125.6 inches
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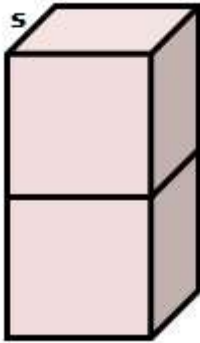
5.

$$-\left(\frac{6}{13}\right)$$

Which of the following is equivalent to the fraction above?

- A. $\frac{6}{13}$
 - B. $\frac{-6}{-13}$
 - C. $\frac{-13}{6}$
 - D. $\frac{-6}{13}$
-

6. Abby stacked two cube-shaped blocks, as shown below, and plans to paint the figure for an art project.



What is the surface area of the figure if $s = 4$ inches?

- A. 160 square inches
 - B. 200 square inches
 - C. 192 square inches
 - D. 128 square inches
-

7. Jean drove 61 miles per hour for a total of 488 miles on a trip. She used the equation below to calculate the time, t , it would take her to complete the trip.

$$488 = 61t$$

What is the constant of proportionality in the equation?

- A. 61
 - B. 488
 - C. 8
 - D. t
-

8. Jerome got in the elevator on the first floor of his office building. He went up 19 floors to his office. Then, Jerome took the stairwell down 3 floors for a morning meeting. After the morning meeting, he took the elevator down 7 floors for lunch in the cafeteria. Then, Jerome took the stairwell up 4 floors for an afternoon meeting. On which floor was his afternoon meeting?

- A. fourteenth
 - B. sixth
 - C. twentieth
 - D. thirty-fourth
-

9. Janie designed a miniature couch for a dollhouse based on her own couch. Janie's couch is $7\frac{1}{2}$ feet long. The scale of the dollhouse is 1 inch : 2 feet. What is the length of the miniature couch for the dollhouse?

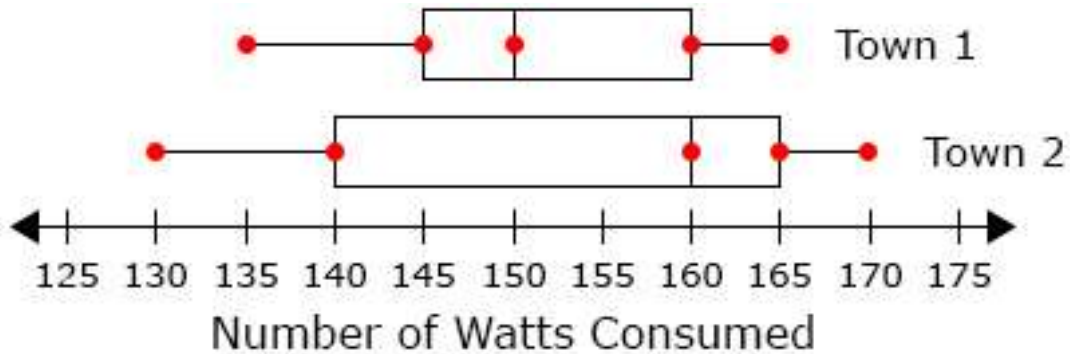
- A. $3\frac{1}{5}$ inches
 - B. $2\frac{1}{2}$ inches
 - C. $3\frac{1}{4}$ inches
 - D. $3\frac{3}{4}$ inches
-

10. Simplify the expression.

- $(4x + 8y) - (10x - 2y + 6)$
- A. $-6x + 6y - 6$
 - B. $-6x + 10y - 6$

- C. $-6x + 10y + 6$
 - D. $-6x + 6y + 6$
-

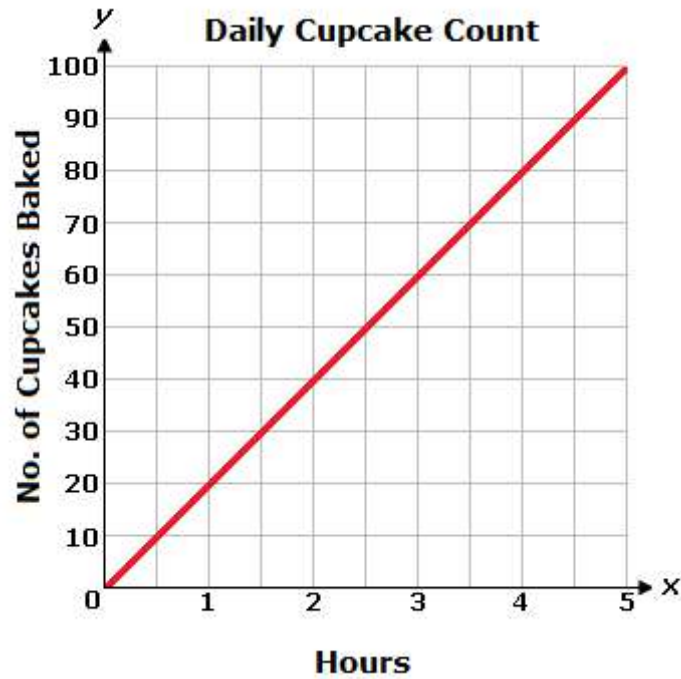
11. Joseph surveyed 20 houses each from two different towns on their electricity consumption in one month. The number of watts consumed are shown in the box plot below.



Which statement correctly compares the data?

- A. Although the median number of watts consumed by town 1 is generally more than that consumed by town 2, the variability creates too much overlap for any conclusion to be made.
 - B. The number of watts consumed by both villages is approximately the same.
 - C. The number of watts consumed by town 1 is generally more than that consumed by town 2.
 - D. The number of watts consumed by town 2 is generally more than that consumed by town 1.
-

12. A bakery makes the same number of cupcakes each hour, as shown on the graph below.



What does the point (2, 40) represent on the graph?

- A. 2 cupcakes made in 40 hours
 - B. 40 cupcakes made in 2 days
 - C. 40 cupcakes made in 2 hours
 - D. 2 cupcakes made in 40 days
-

13. Sinead bought 2 shirts for \$15.92 each and a pair of shoes for \$42.64. If she paid for the items with a \$100 bill, how much change did she receive?

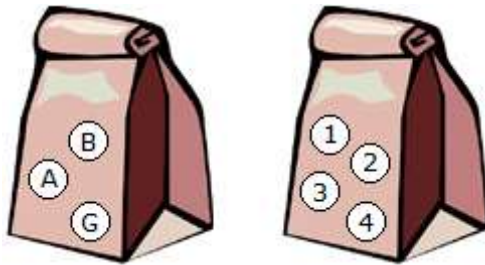
- A. \$9.60
 - B. \$41.44
 - C. \$74.48
 - D. \$25.52
-

14. Convert the following fraction to a decimal.

$$\frac{4}{5}$$

- A. 0.8
 - B. 1.25
 - C. 0.85
 - D. 0.162
-

15. A bag contains chips lettered B, A, and G. A second bag contains four chips numbered 1, 2, 3, and 4.



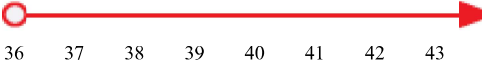
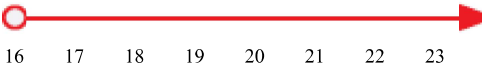


The list in the box below shows all of the possible combinations of letters and numbers which can result from selecting one chip from each bag. If one chip is randomly selected from each bag, what is the probability that a chip with a B on it and a chip with a 2 on it will be selected?

B 1	A 1	G 1
B 2	A 2	G 2
B 3	A 3	G 3
B 4	A 4	G 4

- A. $\frac{1}{6}$
 - B. $\frac{1}{3}$
 - C. $\frac{1}{4}$
 - D. $\frac{1}{12}$
-

16. Jayden scored more than $\frac{2}{3}$ the number of points Kenneth scored. If Jayden scored 24 points, which inequality solution represents, the number of points Kenneth could have scored?

- A. 
- B. 
- C. 
- D. 
-

17. Jennifer and Callie are training for a marathon. Jennifer has run m miles, and Callie has run 3 times as many as Jennifer. The expression shows how many miles they have run altogether.

$$m + 3m$$

Which of the following expressions could be used to get the same results?

- A. $m + 3$
- B. $4m$
- C. $4m^2$
- D. $m + 4$
-

18. So far this season, Shawn has averaged 3 out of 11 free throws per game. Based on his previous performance, how many free throws can Shawn expect to make if he takes 22 free throws in his next game?

- A. 6
- B. 3
- C. 8
- D. 9
-

19. The probability of randomly selecting a nickel from a bag of 50 coins is $\frac{25}{50}$. Which of the following describes the likelihood of selecting a nickel?

- A. likely
- B. neither unlikely nor likely
- C. unlikely
-

20. How many triangles exist with the given angle measures?

$$49^\circ, 49^\circ, 82^\circ$$

- A. No triangle exists with the given angle measures.
- B. One and only one triangle exists with the given angle measures.
- C. More than one triangle exists with the given angle measures.
-

21. Which equation could be used to find the total amount earned, T , for working h hours at d dollars per hour?

- A. $T = dh$
- B. $T = d + h$
- C. $T = \frac{d}{h}$
- D. $T = \frac{h}{d}$
-

22. Emma spent \$21.23 on 2 dozen bagels and a gallon of iced tea. The price of the gallon of iced tea was \$5.25. The following equation can be used to find d , the price of each dozen of bagels.

$$2d + 5.25 = 21.23$$

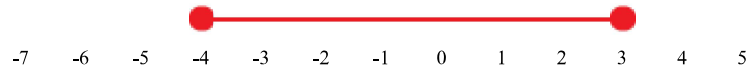
What was the price of each dozen of bagels?

- A. \$10.62
- B. \$5.37
- C. \$7.99
- D. \$6.99
-

23. Jorge deposited a check into his account for \$100.66. Then, he withdrew \$100.66 in cash in the same transaction. What is the net amount of Jorge's transaction?

- A. \$0
- B. \$100.66
- C. -\$100.66
- D. \$201.32
-

24.



What is the length of the red line segment on the number line?

- A. -1
- B. 1
- C. 7
- D. -7

25. Which two ordered pairs represent a proportional relationship?

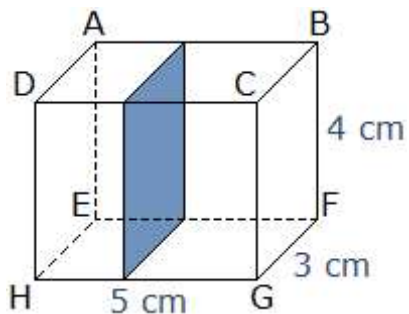
- A. (3, 3) and (6, 9)
- B. (5, 4) and (6, 6)
- C. (4, 3) and (6, 6)
- D. (3, 3) and (6, 6)

26. Simplify.

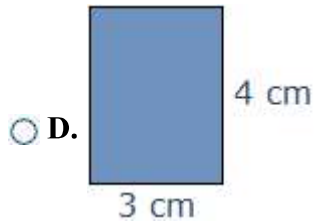
$$2 + \frac{40}{(-2)} - 5(-3)$$

- A. -33
- B. -7
- C. -26
- D. -3

27. The rectangular prism below is intersected by a plane that is parallel to face BCGF, as shown.



Which of the following represents this cross-section?



28. Ayesha bought a 24-pack of lip gloss for \$17.28. What is the unit cost per tube of lip gloss?

- A. \$0.72
 B. \$8.64
 C. \$1.44
 D. \$2.88
-

29. Which of these is an example of a random sample?

- Mrs. Baker selects the 10 students who arrived to class first on Monday to fill out a
 A. survey.

Mrs. Baker selects the 10 students whose names are drawn from a bag to fill out a survey.

Mrs. Baker selects the 10 students who raised their hands to volunteer to fill out a survey.

D. Mrs. Baker selects the 10 students with the highest grade point averages to fill out a survey.

30. The original price of a ski jacket was \$290. It was on sale at a 25% discount. Arianna had a coupon for an additional 10% off the sale price.

What price did Arianna pay for the ski jacket?

A. \$217.50

B. \$188.50

C. \$207.50

D. \$195.75
