Flat Rock Middle 2022 - 2023

Rising 7th Grade Summer Math Assignment

Here is your very first Middle School assignment! We, the 7th grade math teachers are assigning this packet for you to complete over the summer. The 6th grade teachers have prepared each of you with the necessary skills needed to complete the majority of the packet. We do realize that you may come across some challenges, but nothing too much that you can not handle. GO EAGLES!!

We hope that you have a wonderful summer and come to Flat Rock Middle School on August 6, ready to experience SUCCESS!

Due Monday, August 5, 2022

Name _____ Date _____ Class _____

Grade 6

Select the best answer.

1. $7(10 + 7) = 7(10) + 7(7)$ is an example of which property?

   A Commutative C Associative

   B Distributive D Reflexive

2. Find 7^3.

3. What is the value of $9 + 6(6 + 4) \div 5$?

4. Which algebraic expression means "three times the sum of a number and 8"?

   F $3(x + 8)$ H $3 + (x + 8)$

   G $3x + 8$ J $(8 + 3)\,x$

5. Bon Voyage Cruise lines booked 3,776 passengers for a trip to the Bahamas. One fourth of the passengers were children. How many children took the cruise?

6. Stella works three afternoons per week at a local flower shop. She earns $35.50 per day. How many weeks will Stella have to work in order to earn $532.50?

7. Which of the following has the greatest value?

   A -16 C -17

   B -22 D 0

8. What is the solution to $n \div 5 = 1.3$?

9. Divide $30.08 \div 3.2$.

10. If one gallon of water weighs 8.35 lb, about how much would a 20-gal container of water weigh?

11. What is the least common multiple of 6 and 8?

12. What is the GCF of 45 and 72?

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Grade 6

13. At a certain college, of the 200 students entering the pre-veterinary program only 22 completed the program. What fraction of the students completed the program?

14. Divide: $52\frac{1}{2} \div 4$.

15. What is the LCM of 9, 12, and 15?

16. What is $5\frac{1}{5} \div 1\frac{1}{5}$ in simplest form?

17. What is the median of the following group of numbers?

    111 110 120 118 115 113

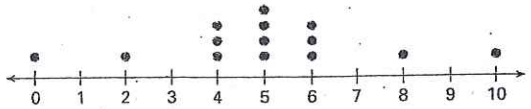
18. The members of a tour group are 23, 23, 28, 25, 47, 27, and 30 years old. To the nearest tenth, find the mean of this data set with and without the outlier.

    F 29; 26 H 27; 25.5

    G 23; 23 J 29; 28.8

19. The data set and dot plot display the number of kilometers Nadia ran each day for 14 days. What is a correct description of the distribution?

5	6	4	4	6	0	8
4	10	2	5	6	5	5



A The data is skewed; the measures of center are varied.

B The data is skewed; the measures of center are equal.

C The data is normal; the measures of center are varied.

D The data is normal; the measures of center are equal.

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20. Which gives the missing value in $\frac{3}{n} = \frac{24}{40}$?

F $\frac{3}{5}$ H 8

G 5 J 15

21. Which set of numbers is in order from greatest to least?

A $\frac{3}{4}$; 18%; 0.72

B 21%; $\frac{1}{5}$; 0.24

C 70%, 0.68, $\frac{2}{3}$

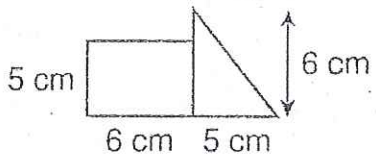
D 0.72; 86%; $\frac{7}{8}$

22. What is 35% of 320?

23. How many feet are there in 9 miles?

24. What is the surface area of a cylinder having a base diameter of 6 inches and a height of 9 inches? Use 3.14 for π.

25. Find the area of the figure.



26. Which set of integers is in order from greatest to least?

F 6, 7, –2, 0

G 9, 8, –2, –4

H –7, –5, –2, 3

J 2, –4, 8, –9

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Grade 6

27. Which of the following inequalities is true?

A $-2 > -1$ C $3 < -3$

B $-12 > 2$ D $-3 < 3$

28. A figure has the following vertices: $A(0, 4)$, $B(3, 8)$, and $C(4, 0)$. What are the vertices of the figure after a reflection across the x-axis?

F (4, 0); (8, 3); (0, 4)

G (0, –4); (3, –8); (4, 0)

H (0, –4); (–3, –8); (–4, 0)

J (0, 4); (–3, 8); (–4, 0)

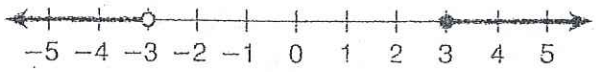
29. Which number would complete the function table?

x	3	5	7	9
y	6	10	14	??

A 10 C 14

B 12 D 18

30. What inequality is shown on the number line?



F $x \geq 3$ or $x < -3$

G $x > 3$ or $x \leq -3$

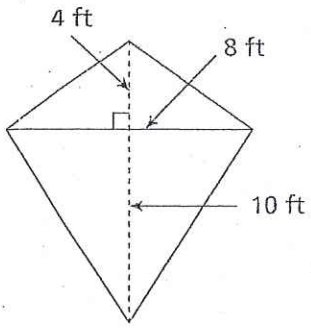
H $-3 < x \leq 3$

J $-3 \leq x < 3$

Name _____ Date _____ Class _____

Select the best answer.

1. What is the area of the polygon in the figure?



2. What is the GCF of 45, 90, and 150?

3. Find the quotient: 2,263 ÷ 26

4. What is the mean?

   5 4 2 8 6 11 3 7 12

5. A t-shirt requires $\frac{3}{4}$ of a yard of material. How many t-shirts can be made from 18 yards of material?

6. Express $\frac{3}{8}$ as a decimal.

7. Rendy has 4 rabbits with red eyes, 6 with blue eyes, 3 with brown eyes, and 2 with gold eyes. What is the ratio of red and gold eyes to blue eyes?

8. Find the least common multiple of 6, 10, and 12.

9. What is $|-13|$?

10. Your favorite store is having a sale. You would like to buy a new CD and 6 videotapes. What is the best estimate for the cost of a CD and 6 videotapes?

Miko's Electronics Plus	
CDs	$14.95
VCR	$129.95
Videotapes	6 for $8.29
Phone	$42.95

   F $20 H $25

   G $23 J $32

11. 14 is what percent of 56?

12. Which is a solution to $x - 9 = 16$?

   F $x = 10$ H $x = 25$

   G $x = 12$ J $x = 7$

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13. Which expression shows how the distributive property can be used to multiply 8×29?

A $8(20) + 8(9)$ C $29(8)$

B $8 + 20 \cdot 8 + 9$ D $8(20) + 9$

14. Seven out of 12 people say they will vote for Mrs. Meekus. If 5,592 people vote, how many are likely to vote for Mrs. Meekus?

15. Solve the equation. Choose the answer in simplest form. $4x = \frac{8}{7}$

A $\frac{1}{28}$ C $\frac{2}{7}$

B $\frac{1}{7}$ D $\frac{7}{2}$

16. What is the area of a rectangle with width 6 meters and length 3 meters?

17. Which gives 1600 m in km?

18. Which gives the missing value in $\frac{2}{5} = \frac{x}{30}$?

F 5 H 12

G 6 J 15

19. Use the data in the table to write an equation for the function.

A $y = 2x - 1$

B $y = 3x + 4$

C $y = 6x - 2$

D $y = 5x + 3$

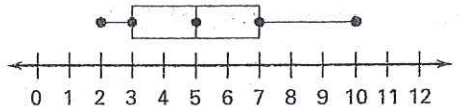
x	y
–2	–2
2	10
4	16

Use this data set for 20 and 21.
0, 4, 5, 9, 2, 7, 6

20. Find the interquartile range.

21. Which is the correct box-and-whisker plot for the data set?

A



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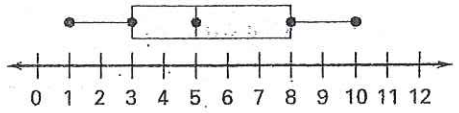

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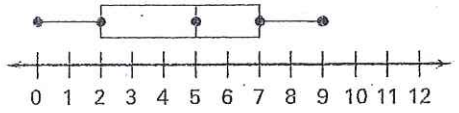

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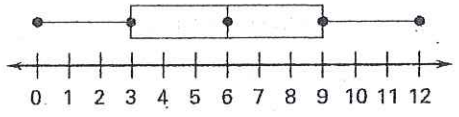


Name _____ Date _____ Class _____

22. Which equation best represents the function described below?
"The school has three times as many male teachers as female teachers."

F $3m = f$

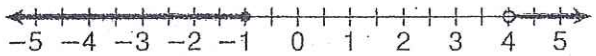
G $m = f + 3$

H $m = 3f$

J $m = \frac{f}{3}$

23. Evaluate $3x - 9$ for $x = 8$.

24. What inequality is shown on the number line?



F $-1 \geq x \geq 4$

G $x \leq -1$ or $x > 4$

H $-1 \leq x < 4$

J $-1 \leq x \leq 4$

25. A used car loan of $2,262.24 is to be paid off in 18 equal monthly payments. How much is each payment?

26. Regina received a score of 39 out of 52 on a quiz. What percent did she earn?

27. Solve $7y = 63$.

28. Simplify 5^4.

29. Simplify $4 \cdot 5 - 2 \cdot 6 + 4$.

30. In what quadrant is the point (3, –4) located?

31. Which shows an expression for "the sum of 3 times a number and 5"?

A $3x + 5$ C $5 + x$

B $5x + 3$ D $2x + 5$

32. A watch cost $75.99. If the sales tax rate is 6.25%, what is the amount of sales tax?

F $0.48 H $4.75

G $2.19 J $474.94

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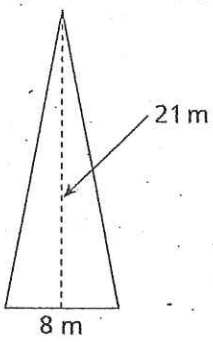
33. Doug counts the number of boys and girls in his math class and makes a frequency table. How many boys are in his class?

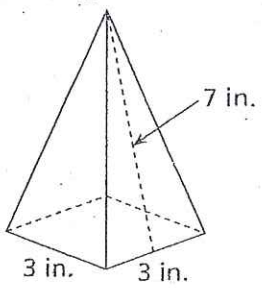
Student	Boy	Girl
Frequency	12	13

A 13 C 10

B 12 D 2

34. A flower garden is in the shape of a triangle as shown in the figure.



What is the area of the garden?

35. What is the surface area of the pyramid in the figure?