

# Mississippi MAAP 2023 Grade 6 Math Practice

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## **Grade 6 Mathematics**

### ***Sample Test Items***

1. Jamie is mixing 3 parts of red paint for every 2 parts of blue paint. Which statements are true about the ratios of paint?

Select **two** answer choices.

- Ⓐ The amount of blue paint is  $\frac{2}{3}$  the amount of red paint.
- Ⓑ There are 2 parts of blue paint for every 5 parts of red paint.
- Ⓒ The amount of red paint is  $\frac{5}{3}$  the amount of total paint mixture.
- Ⓓ The amount of total paint mixture is  $\frac{3}{2}$  the amount of blue paint.
- Ⓔ There are 5 parts of total paint mixture for every 2 parts of blue paint.

- 2.** It takes Julio 6 hours to bake 5 cakes. At what rate are the cakes baked?

- Ⓐ  $\frac{5}{6}$  cake per hour
- Ⓑ 1 cake per hour
- Ⓒ  $\frac{6}{5}$  cakes per hour
- Ⓓ 11 cakes per hour

**3.** Which table displays equivalent ratios?

(A)

Input	Output
1	5
3	7
5	9

(B)

Input	Output
2	3
4	6
8	12

(C)

Input	Output
1	3
2	4
3	5

(D)

Input	Output
2	3
4	5
5	6

4. A field in the shape of a rectangle has an area of  $\frac{1}{3}$  square mile. The length of the field is  $\frac{2}{5}$  mile. What is the width of the field?

- Ⓐ  $\frac{2}{15}$  mile
- Ⓑ  $\frac{11}{15}$  mile
- Ⓒ  $\frac{5}{6}$  mile
- Ⓓ  $1\frac{1}{5}$  miles

**5.** What is the quotient of 38,304 and 42?

Ⓐ 807

Ⓑ 892

Ⓒ 912

Ⓓ 933

- 6.** The following question has two parts. First, answer Part A. Then, answer Part B.

**Part A**

Casey and 5 friends went to the movies. They spent a total of \$52.50 buying tickets. The cost of each movie ticket is the same. How much did each movie ticket cost?

Write the answer in the box.

\$

**Part B**

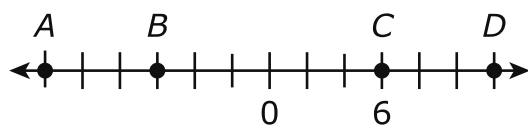
They each bought a popcorn and drink combo for \$5.25 each. How much did Casey and his friends spend altogether at the concession stand?

Write the answer in the box.

\$



7. Four different points are shown on the number line.



Which point represents  $-6$  on the number line?

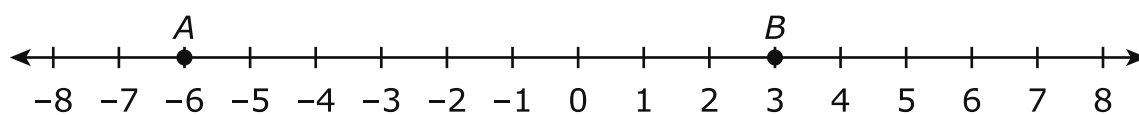
Ⓐ *A*

Ⓑ *B*

Ⓒ *C*

Ⓓ *D*

8. A number line is shown.



Which expression could be used to determine the distance between point  $A$  and point  $B$ ?

- Ⓐ  $-6 - 3$
- Ⓑ  $-6 + 3$
- Ⓒ  $|-6 + 3|$
- Ⓓ  $|-6 - 3|$

9. Hannah wrote an expression equivalent to  $7^6$ . Which expression could be Hannah's?

Ⓐ  $6 + 6 + 6 + 6 + 6 + 6 + 6$

Ⓑ  $6 \cdot 6 \cdot 6 \cdot 6 \cdot 6 \cdot 6 \cdot 6$

Ⓒ  $7 + 7 + 7 + 7 + 7 + 7$

Ⓓ  $7 \cdot 7 \cdot 7 \cdot 7 \cdot 7 \cdot 7$

**10.** Which expression matches the phrase “4 less than 3 times a number”?

Ⓐ  $4 - 3n$

Ⓑ  $3n - 4$

Ⓒ  $4n - 3$

Ⓓ  $3 - 4n$

**11.** Which expressions are equivalent to  $8 + 2m$ ?

Select **two** answer choices.

Ⓐ  $2(4 + m)$

Ⓑ  $10m$

Ⓒ  $8 + m^2$

Ⓓ  $8 + m + m$

Ⓔ  $4(2 + m)$

**12.** Which value of  $x$  makes  $7x = 147$  true?

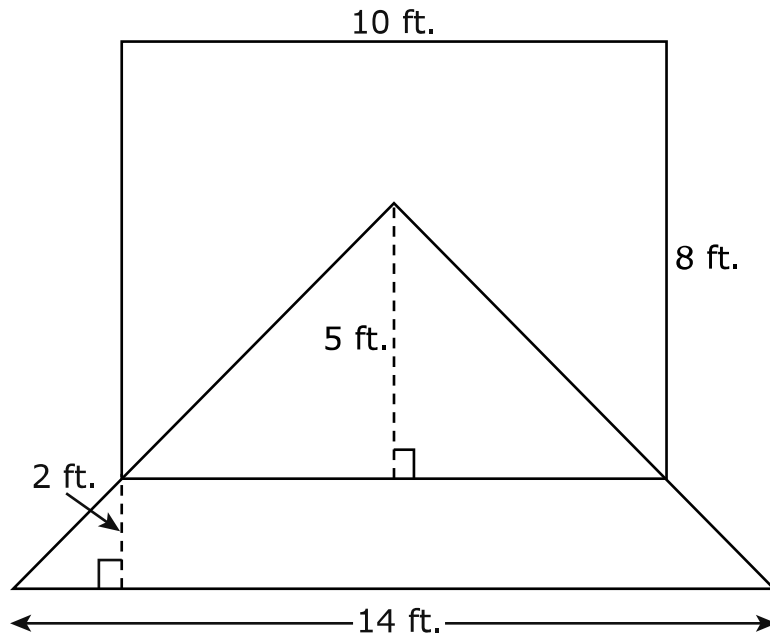
Ⓐ 11

Ⓑ 21

Ⓒ 140

Ⓓ 154

- 13.** An artist is painting a mural at the Hattiesburg Zoo. She draws a diagram of the mural before painting.



What is the total area of the mural?

Write the answer in the box.

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 ft.<sup>2</sup>

- 14.** The dimensions of a concrete basketball court are  $31\frac{1}{3}$  yards by  $16\frac{2}{3}$  yards. The thickness of the concrete pad is  $\frac{1}{9}$  yard. What is the volume of the concrete pad?

Ⓐ  $48\frac{1}{9} \text{ yd.}^3$

Ⓑ  $58\frac{2}{81} \text{ yd.}^3$

Ⓒ  $497\frac{1}{9} \text{ yd.}^3$

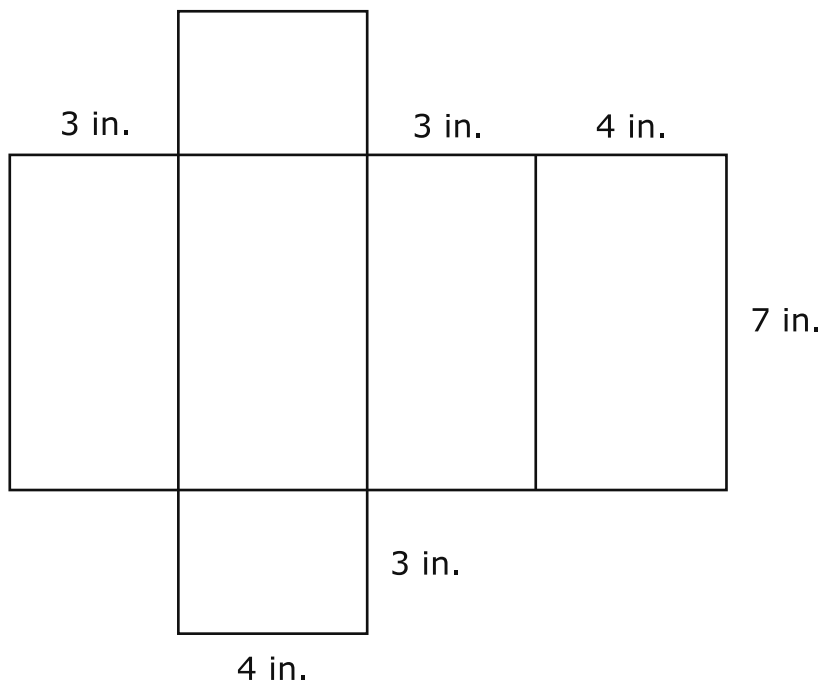
Ⓓ  $522\frac{2}{9} \text{ yd.}^3$



- 15.** A design for a triangular coffee table is drawn on a coordinate plane. One corner of the table is located at  $(3, 13)$ . A second corner is located at  $(2, 3)$ . The third corner of the table is 7 units to the right of the second corner. What are the coordinates of the third corner?

- Ⓐ  $(2, 10)$
- Ⓑ  $(3, 6)$
- Ⓒ  $(9, 3)$
- Ⓓ  $(10, 13)$

- 16.** Tiffany wants to wrap a gift that is in the shape of a rectangular prism. The gift has a length of 7 inches, a width of 4 inches, and a height of 3 inches. The net of the gift is shown.



What is the minimum amount of wrapping paper Tiffany needs to wrap the gift?

- Ⓐ 84 cubic inches
- Ⓑ 84 square inches
- Ⓒ 122 cubic inches
- Ⓓ 122 square inches

**17.** Which questions are statistical questions?

Select **two** answer choices.

- Ⓐ How old is my math teacher?
- Ⓑ How many feet are in three miles?
- Ⓒ What is each student's favorite dessert?
- Ⓓ In what state is the Statue of Liberty located?
- Ⓔ How many pets does each kid in my class have?

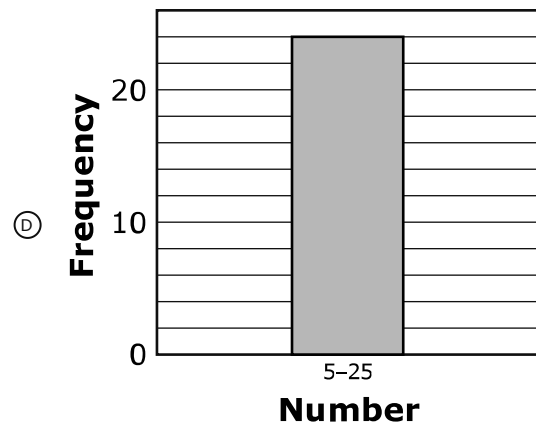
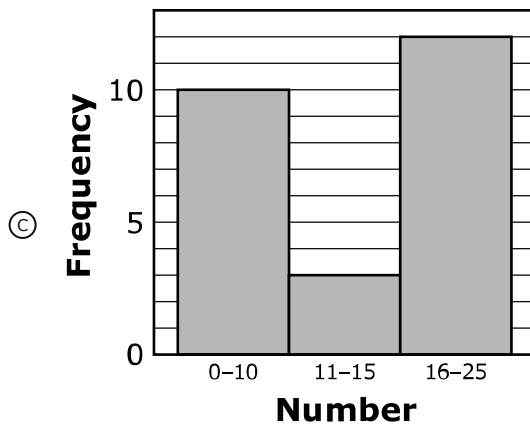
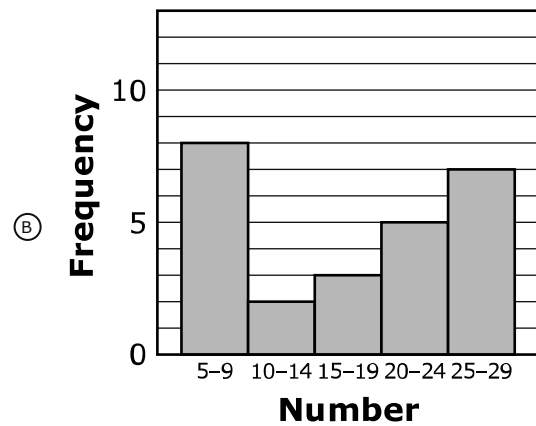
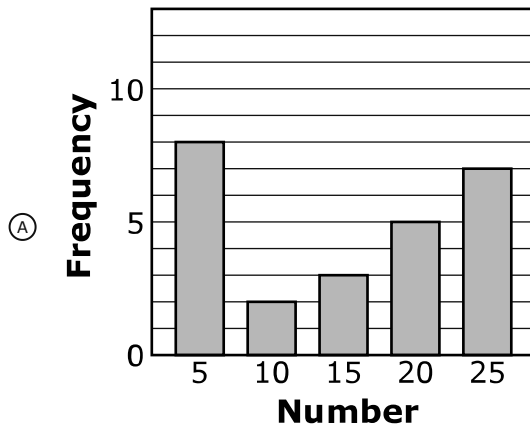
**18.** Which question could be answered using a measure of variability?

- Ⓐ How many boys are in the sixth grade?
- Ⓑ What is the average number of touchdowns scored during a football season?
- Ⓒ If the dance team lined up from shortest to tallest, who would be in the middle?
- Ⓓ What is the height difference between the shortest and tallest person in the room?

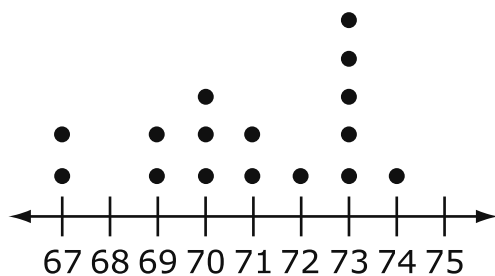
19. A frequency table is shown.

Number	5	10	15	20	25
Frequency	8	2	3	5	7

Which histogram accurately displays the data in the frequency table?



- 20.** The basketball team's scores for the last 16 games are shown in the dot plot.



How many times did the basketball team have a score in the 70s?

- Ⓐ 3
- Ⓑ 4
- Ⓒ 10
- Ⓓ 12

**Grade 6 Math Sample Test Items**  
**Paper-Pencil Answer Key Document**

<b>Sequence</b>	<b>Key</b>	<b>Standard</b>	<b>Possible Points</b>
1	A,E	6.RP.1	1
2	A	6.RP.2	1
3	B	6.RP.3	1
4	C	6.NS.1	1
5	C	6.NS.2	1
6	8.75, 31.50	6.NS.3	2
7	B	6.NS.6	1
8	D	6.NS.9	1
9	D	6.EE.1	1
10	B	6.EE.2	1
11	A,D	6.EE.4	1
12	B	6.EE.5	1
13	104	6.G.1	1
14	B	6.G.2	1
15	C	6.G.3	1
16	D	6.G.4	1
17	C,E	6.SP.1	1
18	D	6.SP.3	1
19	B	6.SP.4	1
20	D	6.SP.5	1