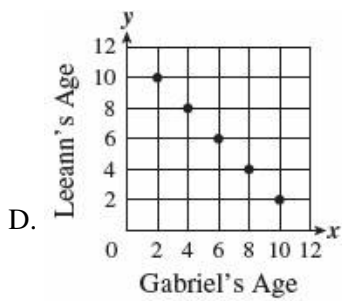
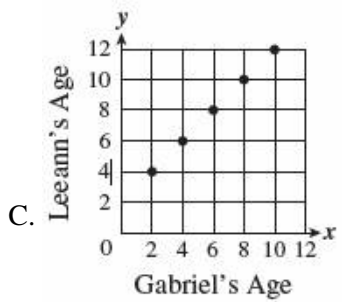
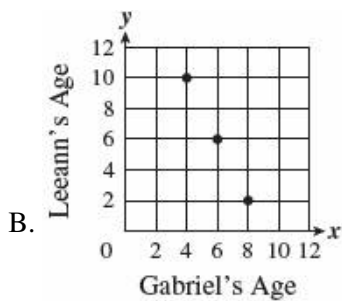
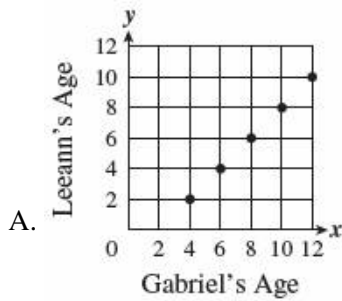


Name: \_\_\_\_\_

Date: \_\_\_\_\_

1. Gabriel is 2 years older than his sister, Leeann. Which of the following graphs correctly represents the relationship between Gabriel's age and Leeann's age, in years?

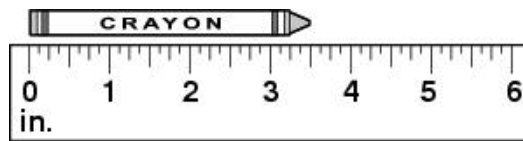


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2. Simplify  $\frac{24}{60}$  to lowest terms.

- A.  $\frac{6}{15}$
- B.  $\frac{2}{5}$
- C.  $\frac{3}{7}$
- D.  $\frac{8}{20}$

3. Measure the length of the crayon to the nearest  $\frac{1}{8}$  of an inch.



- A. 3 inches
- B.  $3\frac{1}{4}$  inches
- C.  $3\frac{1}{2}$  inches
- D.  $3\frac{5}{8}$  inches

4. There is a box that contains one yellow pencil, two green pencils, three red pencils, and four blue pencils. If you picked one pencil out of the box without looking, which color would most likely be picked?

- A. blue
- B. green
- C. yellow
- D. red

5. **The number of words Maria typed varied directly with the amount of time she spent typing. If she typed 275 words in 5 minutes, how long would it take her to type 1,100 words?**

- A. 220 minutes
- B. 20 minutes
- C. 15 minutes
- D. 4 minutes

6.

Which is the prime factorization of 136?

- A.  $2 \times 2 \times 2 \times 17$
  - B.  $2 \times 2 \times 3 \times 13$
  - C.  $3 \times 3 \times 13$
  - D.  $2 \times 5 \times 23$
- 

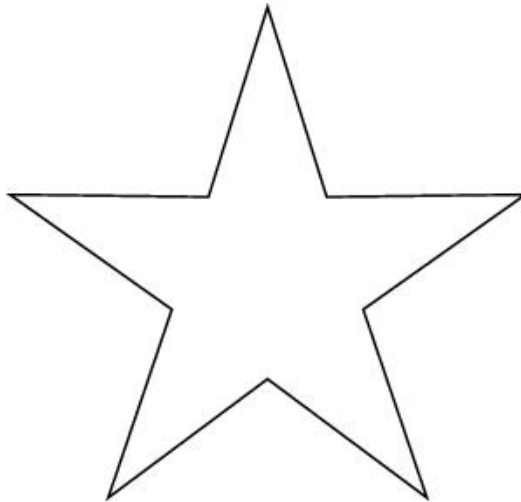
7. Kyra will toss a number cube that has faces numbered 1 through 6. What is the probability that the cube will land with an even number showing on the top face?

- A.  $\frac{1}{6}$
- B.  $\frac{1}{5}$
- C.  $\frac{1}{3}$
- D.  $\frac{1}{2}$

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8. The star below has rotational symmetry.



Which of these is the angle of rotation for this star?

- A.  $5^\circ$
  - B.  $72^\circ$
  - C.  $90^\circ$
  - D.  $108^\circ$
-

9. Ronin surveyed 200 students on their favorite type of restaurant.

Restaurant Type	Number of Students
Italian	62
Mexican	33
Fast Food	75
Chinese	30

What type of graph should Ronin use to BEST display his findings?

- A. line plot
  - B. circle graph
  - C. pictograph
  - D. bar graph
- 

10. Lindsey wants to build a rectangular pen for her dog. She wants the pen to measure 30 feet long and 6 feet wide. How much fencing does she need?

- A. 36 feet
  - B. 36 square feet
  - C. 72 feet
  - D. 72 square feet
- 

11. What is the greatest common factor of 16 and 56?

- A. 24
  - B. 16
  - C. 8
  - D. 4
-

12. Imari spun an equally divided spinner 20 times. The chart below shows the results.

**Spinner Results**

Color	Number of Times Spun
Red	4
Yellow	7
Blue	5
Green	4

If Imari spun the same spinner 1,000 times, what would be the theoretical probability the spinner would land on green?

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

13.

Jamie is forming a cylinder out of two circles and a rectangle. The area of each circle is  $4\pi$ . The diameter of each circle is 4 cm. The height of the rectangle is 6 cm. Which shows how Jamie could calculate the surface area the cylinder?

- A.  $2(4\pi) + 6(4\pi)$
  - B.  $2(4\pi) + 6(4)$
  - C.  $4\pi \times 4 \times 6\pi$
  - D.  $4\pi \times 4 \times 6$
-



14.

Which represents a two-dimensional view from directly above the figure?

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

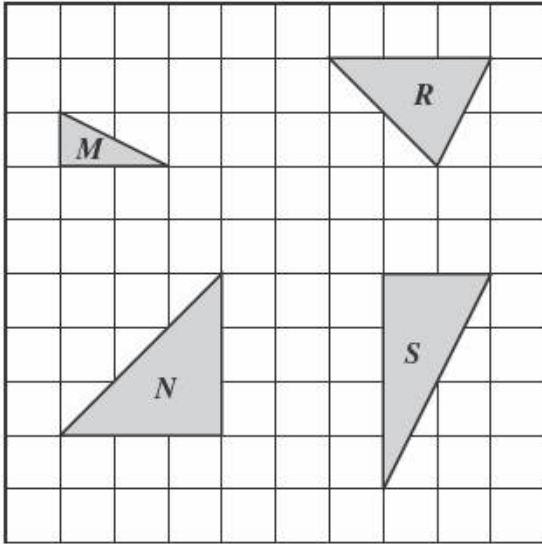
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15. If \$55 of a \$220 budget is spent on clothes, what percent of the budget is spent on clothes?

- A. 25%
  - B. 55%
  - C. 85%
  - D. 95%
-

16. Four triangles are shown on the grid below.



Which two triangles appear to be similar?

- A.  $M$  and  $S$
- B.  $M$  and  $N$
- C.  $N$  and  $S$
- D.  $R$  and  $N$

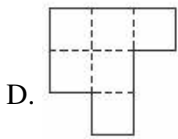
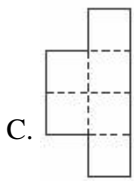
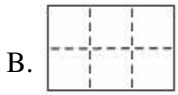
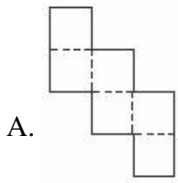
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17.

Karmen eats  $\frac{1}{4}$  of a pint of ice cream. Ben eats  $\frac{2}{3}$  of his pint of ice cream. How many total pints of ice cream have been eaten.

- A.  $\frac{11}{12}$
- B.  $\frac{3}{4}$
- C.  $\frac{5}{8}$
- D.  $\frac{5}{12}$

18. Which of the following nets can be folded along the dashed lines to form a cube?



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19. In every carton of eggs, there are 12 eggs. If  $c$  equals the number of cartons and  $e$  equals the number of eggs, which equation shows the direct proportion of cartons to eggs?

A.  $e = 12c$

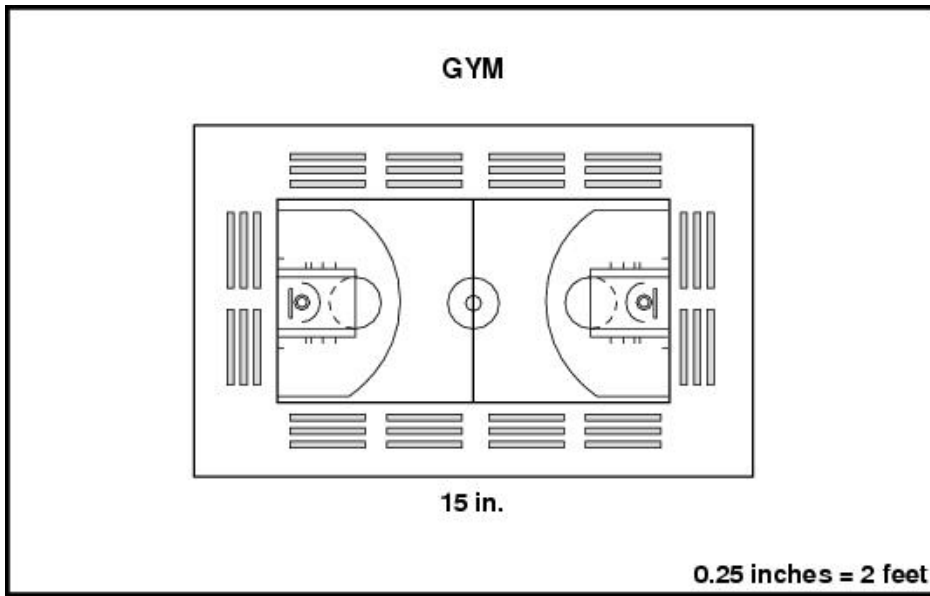
B.  $c = 12e$

C.  $e = c + 12$

D.  $c = e - 12$



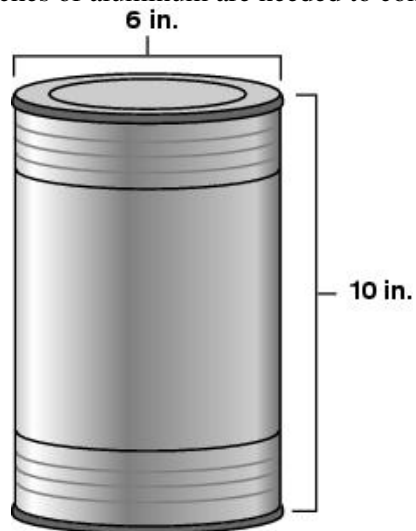
20. An architect's blueprint shows the length of a new school gym to be 15 inches.



What is the actual length of the new gym?

- A. 30 feet
- B. 90 feet
- C. 120 feet
- D. 150 feet

21. How many square inches of aluminum are needed to construct this can?



- A. 244.92 inches<sup>2</sup>
- B. 282.6 inches<sup>2</sup>
- C. 414.48 inches<sup>2</sup>
- D. 602.88 inches<sup>2</sup>

22. A tank in the shape of a rectangular prism measures 16 feet wide, 22.5 feet tall, and 10 feet deep. What is the volume of the tank?

- A. 48.5 cubic feet
- B. 1,490 cubic feet
- C. 3,600 cubic feet
- D. 7,200 cubic feet

23. Bjorn is working on a class project on foreign newspapers. The chart below shows the information that Bjorn will present to his class.

**Foreign Newspapers**

Country	Number of Newspapers
Spain	85
Venezuela	89
Canada	107
Sweden	98
United Kingdom	103

Which of the following is a stem-and-leaf plot that correctly displays this information?

A.

Stem	Leaf
8	5 9
9	8
10	3 7

<b>KEY</b>
6   2 represents 62

B.

Stem	Leaf
1	3 7
8	9 5
9	8

<b>KEY</b>
6   2 represents 62

C.

Stem	Leaf
9	8
8	9 5
10	3 7

<b>KEY</b>
6   2 represents 62

D.

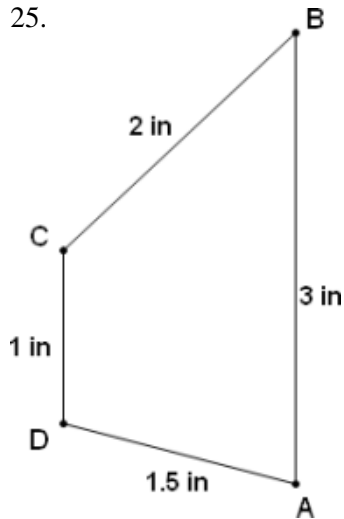
Stem	Leaf
8	85 89
9	98
10	103 107

<b>KEY</b>
6   2 represents 62

24. Julie and Lynn each have a photo album that holds 100 pictures. Julie's photo album is  $\frac{2}{5}$  full, and Lynn's photo album is  $\frac{3}{4}$  full. How many more photos does Lynn have in her photo album than Julie?

- A. 30
- B. 35
- C. 40
- D. 75

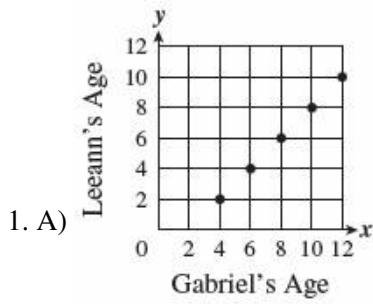
25.



A scale drawing of Martha's garden is shown. The actual length of side AB is 25 feet. What is the actual length of side CB?

- A.  $16\frac{2}{3}$  feet
- B.  $12\frac{1}{2}$  feet
- C. 22 feet
- D.  $37\frac{1}{2}$  feet

**Answer Key**



2. B)  $\frac{2}{5}$

3. C)  $3\frac{1}{2}$  inches

4. A) blue

5. B) 20 minutes

6. A)  $2 \times 2 \times 2 \times 17$

7. D)  $\frac{1}{2}$

8. B)  $72^\circ$

9. D) bar graph

10. C) 72 feet

11. C) 8

12. B)  $\frac{1}{4}$

13. A)  $2(4\pi) + 6(4\pi)$

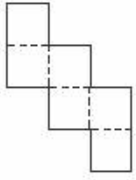
14. B) 

--	--	--

15. A) 25%

16. A) *M* and *S*

17. A)  $\frac{11}{12}$



18. A)

19. A)  $e = 12c$

20. C) 120 feet

21. A) 244.92 inches<sup>2</sup>

22. C) 3,600 cubic feet

	Stem	Leaf
	8	5 9
23. A)	9	8
	10	3 7

KEY	
6   2	represents 62

24. B) 35

25. A)  $16\frac{2}{3}$  feet