

24. According to the text, *Starry Night* was on display where in 1926?

Starry Night by Vincent van Gogh, one of the most iconic and beloved paintings in the world, has had a journey that is as fascinating as the artwork itself. Painted in 1889 during the artist's stay at the Saint-Paul-de-Mausole asylum in Saint-Rémy-de-Provence, France, the masterpiece began its odyssey in the possession of Vincent's brother, Theo van Gogh, after the artist's tragic death in 1890.

Upon Theo's passing in 1891, the painting then passed to his widow, Johanna van Gogh-Bonger, who worked tirelessly to promote her brother-in-law's work, ensuring that the world would come to appreciate his genius. In 1900, *Starry Night* found a new home in the Galerie Bernheim-Jeune in Paris.

It was only in 1941 that the painting found its permanent residence at the Museum of Modern Art (MoMA) in New York City. Industrialist and art collector Stephen C. Clark acquired it and generously donated it to the museum. Since then, *Starry Night* has become a centerpiece of MoMA's collection, captivating visitors from around the world with its swirling stars and evocative landscape. Its journey through time and ownership has made it a symbol of artistic transcendence, and it is now celebrated as an integral part of the rich tapestry of art history.

- A) Galerie Bernheim-Jeune in Paris
- B) Museum of Modern Art (MoMA) in New York City
- C) Saint-Paul-de-Mausole asylum in Saint-Rémy-de-Provence, France
- D) The Louvre Museum in Paris, France

25. Which choice completes the text with the most logical and precise word or phrase?

In Nathaniel Hawthorne's *The Scarlet Letter*, the Puritan society of 17th-century New England serves as _____ backdrop for the story of Hester Prynne, a woman condemned for adultery. Hawthorne's novel delves into themes of sin, guilt, and redemption as Hester grapples with the consequences of her actions. The scarlet letter "A" she is forced to wear becomes a symbol of her defiance in the face of societal judgment.

- A) an inconsequential
- B) a traditional
- C) an indifferent
- D) a somber

Mathematics—Module 1

1. The ratio of new car sales to used car sales at the car lot is 3 : 5. If the total car sales were \$287,400 last month, what was the total of the used car sales?

2. A company has been asked to design a building for an athletic event. The building is in the shape of a square pyramid. The pyramid has a height of 481 feet, and the length of each side of the base is 756 feet. What is the approximate volume of the pyramid?

- A) $1.21 \times 10^5 \text{ ft}^3$
- B) $4.85 \times 10^5 \text{ ft}^3$
- C) $9.16 \times 10^7 \text{ ft}^3$
- D) $2.75 \times 10^8 \text{ ft}^3$

3. Simplify the following expression: $(2x^2 + 3x + 2) - (x^2 + 2x - 3)$

- A) $x^2 + x + 5$
- B) $x^2 + x - 1$
- C) $x^2 + 5x + 5$
- D) $x^2 + 5x - 1$

4. Simplify the following: $\frac{x^2}{y^2} + \frac{x}{y^3}$

- A) $\frac{x^3+x}{y^3}$
- B) $\frac{x^2+xy}{y^3}$
- C) $\frac{x^2y+xy}{y^3}$
- D) $\frac{x^2y+x}{y^3}$

5. The graph of $y = -x^2 + 5x$ intersects the graph of $y = 2x$ at $(0, 0)$ and (a, b) . What is the value of b ?

6. Max reads three books averaging 360 pages. Lucy reads five books averaging 200 pages. What is the average length of all the books that Max and Lucy read?

- A) 212 pages
- B) 232 pages
- C) 260 pages
- D) 295 pages

7. Solve: $7x^2 + 6x = -2$.

- A) $x = \frac{-3 \pm \sqrt{23}}{7}$
- B) $x = \pm i\sqrt{5}$
- C) $x = \pm \frac{2i\sqrt{2}}{7}$
- D) $x = \frac{-3 \pm i\sqrt{5}}{7}$



8. Ride Service A charges a flat rate of \$10 for the first 10 miles, plus 25 cents per mile for anything over 10 miles. Ride Service B charges 40 cents per mile. Both services charge the same for a trip that is how long?

- A) 40 miles
- B) 45 miles
- C) 50 miles
- D) 55 miles

9. What is the perimeter of a 45-45-90 triangle if the hypotenuse is 4 inches?

- A) 4 inches
- B) 8 inches
- C) $4 + 4\sqrt{2}$ inches
- D) $4 + 2\sqrt{2}$ inches

10. Which of the following is equivalent to $x^2 + 3 > 2x + 2$?

- A) $x < -1$
- B) $x \neq 1$
- C) $x > 1$
- D) $x < -1$ or $x > 1$

11. In the system of equations below, n is a constant and x and y are variables. For which of the following values of n will the system have no solution?

$$\begin{aligned} 3x - y &= 2 \\ nx + 3y &= -5 \end{aligned}$$

- A) $-\frac{1}{3}$
- B) 3
- C) $-\frac{5}{3}$
- D) -9

12. Gillian is deciding between two data plans for her cellphone. Plan A provides 2.5 GB of data for a flat rate of \$20/month and charges \$15 per GB for any extra use. Plan B provides unlimited data for \$50/month. What amount of data would Gillian have to use in a month for both plans to cost the same amount?

- A) 2 GB
- B) 3.5 GB
- C) 3.75 GB
- D) 4.5 GB

13. Every person attending a meeting hands out a business card to every other person at the meeting. If a total of 30 cards are handed out, how many people are at the meeting?

- A) 5 people
- B) 6 people
- C) 10 people
- D) 15 people

14. Which of the following is a solution to the inequality $4x - 12 < 4$?

- A) 7
- B) 6
- C) 4
- D) 3

15. The table below shows the breakdown of soup orders at a restaurant. There were two kinds of soup (chicken and veggie) and two sizes (cup and bowl). If a person among those who ordered soup is chosen at random, what is the probability that this person ordered a cup of veggie soup?

	Chicken	Veggie	Total
Cup	7	8	15
Bowl	15	12	27
Total	22	20	42

- A) $\frac{8}{15}$
- B) $\frac{1}{6}$
- C) $\frac{2}{5}$
- D) $\frac{4}{21}$

16. Jamal plants a white petunia for every three red petunias in the flowerbed. If he plants 8 white petunias and r red petunias, which of the following equations is true?

- A) $3r = 8$
- B) $8r = 3$
- C) $\frac{r}{3} = 8$
- D) $r + 3 = 8$

17. Solve $\sqrt{2x} - 3 = \sqrt{2x - 15}$.

- A) $x = 0$
- B) $x = 4$
- C) $x = 8$
- D) $x = 10$

18. What is the solution to the equation: $4\sqrt{x} + 8 = 24$?

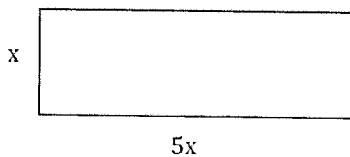
- A) $x = 2$
- B) $x = 4$
- C) $x = 12$
- D) $x = 16$

19. What is the sum of all values of x that satisfy the following equation?

$$3x^2 - 3x - 34 = 2$$

- A) -3
- B) 0
- C) 1
- D) 4

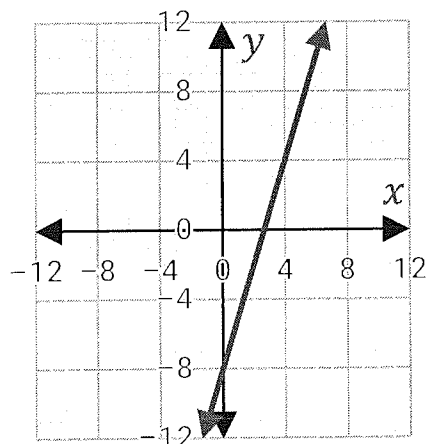
20. The rectangle below has an area of 245 inches^2 . What is the length of the longest side of the rectangle?



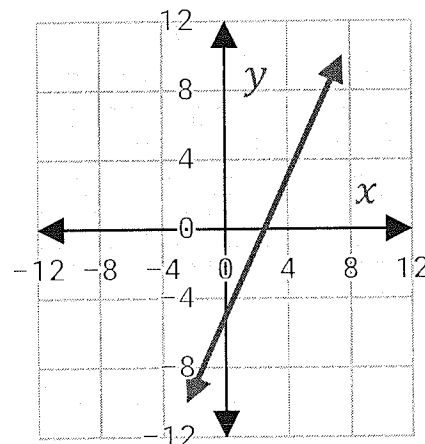
- A) 25 inches
- B) 30 inches
- C) 35 inches
- D) 40 inches

21. The variables x and y have a linear relationship. The table below shows a few sample values. Which of the following graphs correctly represents the linear equation relating x and y ?

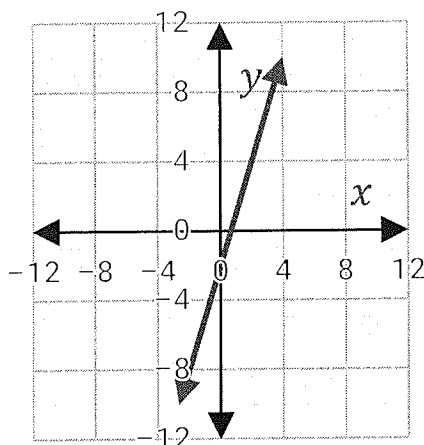
x	y
-2	-11
-1	-8
0	-5
1	-2
2	1



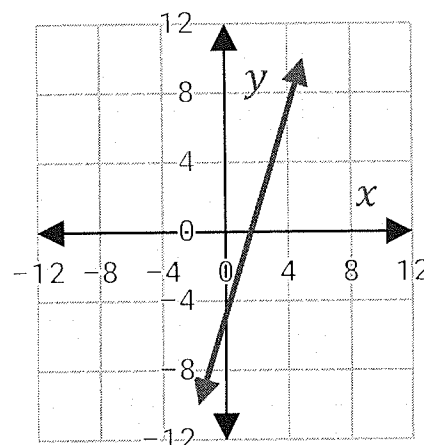
A.



B.



C.



D.

22. Roxana walks x meters west and $x + 20$ meters south to get to her friend's house. On a neighborhood map which has a scale of 1 cm: 10 m, the direct distance between Roxana's house and her friend's house is 10 cm. How far did Roxana walk to her friend's house?