



# The SAT<sup>®</sup>

---

# Practice Test

---

**Make time to take the practice test.**  
It's one of the best ways to get ready  
for the SAT.

After you've taken the practice test, score it  
right away at [sat.org/scoring](https://sat.org/scoring).

2021-04-SchoolDay



3



3

## Math Test – No Calculator

25 MINUTES, 20 QUESTIONS

Turn to Section 3 of your answer sheet to answer the questions in this section.

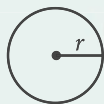
### DIRECTIONS

For questions 1-15, solve each problem, choose the best answer from the choices provided, and fill in the corresponding circle on your answer sheet. For questions 16-20, solve the problem and enter your answer in the grid on the answer sheet. Please refer to the directions before question 16 on how to enter your answers in the grid. You may use any available space in your test booklet for scratch work.

### NOTES

1. The use of a calculator **is not permitted**.
2. All variables and expressions used represent real numbers unless otherwise indicated.
3. Figures provided in this test are drawn to scale unless otherwise indicated.
4. All figures lie in a plane unless otherwise indicated.
5. Unless otherwise indicated, the domain of a given function  $f$  is the set of all real numbers  $x$  for which  $f(x)$  is a real number.

### REFERENCE

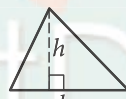


$$A = \pi r^2$$

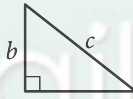
$$C = 2\pi r$$



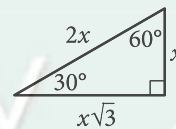
$$A = \ell w$$



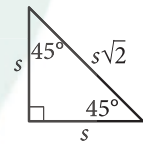
$$A = \frac{1}{2}bh$$



$$c^2 = a^2 + b^2$$



Special Right Triangles



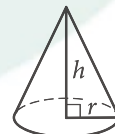
$$V = \ell wh$$



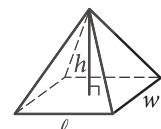
$$V = \pi r^2 h$$



$$V = \frac{4}{3}\pi r^3$$



$$V = \frac{1}{3}\pi r^2 h$$



$$V = \frac{1}{3}\ell wh$$

The number of degrees of arc in a circle is 360.

The number of radians of arc in a circle is  $2\pi$ .

The sum of the measures in degrees of the angles of a triangle is 180.

CONTINUE



3



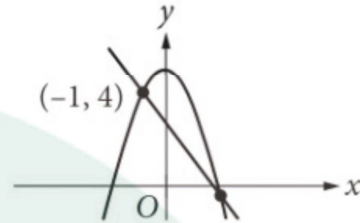
3

1

Which expression is equivalent to  $\frac{12x^3}{8x^2}$ , where  $x$  is not equal to 0?

- A)  $\frac{4}{x}$
- B)  $\frac{3x}{2}$
- C)  $4x$
- D)  $20x^5$

2



The graph of a linear equation and the graph of a quadratic equation are shown. What is true about the point  $(-1, 4)$ ?

- A) The point satisfies only the quadratic equation.
- B) The point satisfies only the linear equation.
- C) The point satisfies both equations.
- D) The point satisfies neither equation.

3

A ball is thrown upward from a height of 3 feet above the ground. Assuming no air resistance, the function  $h$  defined by  $h(t) = -16t^2 + 36t + 3$  models the ball's height  $h(t)$ , in feet, above the ground  $t$  seconds after it is thrown. Based on the model, what is the meaning of  $h(2) = 11$  in this context?

- A) The ball hits the ground 2 seconds after it is thrown.
- B) The ball hits the ground 11 seconds after it is thrown.
- C) The ball is 11 feet above the ground 2 seconds after it is thrown.
- D) The ball is 2 feet above the ground 11 seconds after it is thrown.

CONTINUE

3



3

4

Which expression is equivalent to  $(4x^5 + 5x^4) - (2x^5 + 3x^4)$  ?

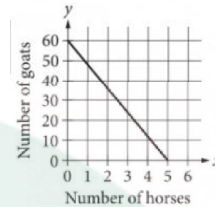
- A)  $2x^5 - 2x^4$
- B)  $2x^5 + 2x^4$
- C)  $6x^5 - 8x^4$
- D)  $6x^5 + 8x^4$

5

At sea level, the boiling point of water is 212 degrees Fahrenheit( $^{\circ}\text{F}$ ) . For every 500-foot increase in elevation above sea level, the boiling point of water decreases by about  $1^{\circ}\text{F}$ . Which equation models water's boiling point  $y$ , in  $^{\circ}\text{F}$ , in terms of  $x$ , the elevation, in feet above sea level?

- A)  $y = -\frac{1}{500}x + 212$
- B)  $y = -500x + 212$
- C)  $y = \frac{1}{500}x - 212$
- D)  $y = 500x - 212$

6



The line shown models the possible combinations of the number of goats and horses a certain 10-acre farm can sustain, based on the number of acres of land each animal needs. Based on this model, how many acres of land on the farm does each horse need?

- A) 2
- B) 5
- C) 6
- D) 12

7

$$y < x - 4$$

Which of the following ordered pairs  $(x, y)$  satisfies the inequality above?

- A) (0, 3)
- B) (3, 0)
- C) (0, 6)
- D) (6, 0)

CONTINUE

3



3

8

In right triangle  $PQR$ , the length of side  $\overline{PQ}$  is 70, the measure of angle  $P$  is  $90^\circ$ , and the measure of angle  $R$  is  $38^\circ$ . Which of the following represents the length of side  $\overline{QR}$ ?

- A)  $\frac{70}{\sin 52^\circ}$
- B)  $\frac{70}{\sin 38^\circ}$
- C)  $70 \sin 52^\circ$
- D)  $70 \sin 38^\circ$

9

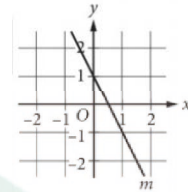
Some values of  $x$  and the corresponding values of  $f(x)$  are given in the table shown.

$x$	$f(x)$
2	1
5	1.5
8	2
11	2.5

If there is a linear relationship between  $x$  and  $f(x)$ , which of the following equations gives this relationship?

- A)  $f(x) = \frac{1}{2}x + \frac{1}{2}$
- B)  $f(x) = \frac{1}{2}x - \frac{1}{2}$
- C)  $f(x) = \frac{1}{6}x + \frac{5}{6}$
- D)  $f(x) = \frac{1}{6}x + \frac{2}{3}$

10



Line  $m$  is shown in the  $xy$ -plane. Line  $p$  (not shown) is perpendicular to line  $m$ . Which of the following could be the equation of line  $p$ ?

- A)  $y = \frac{1}{2}x + 7$
- B)  $y = 2x + 7$
- C)  $y = -\frac{1}{2}x + 7$
- D)  $y = -2x + 7$

CONTINUE

3



3

11

What is the  $y$ -intercept of the graph of  $y = (x - 4)^2 + 3$  in the  $xy$ -plane?

- A)  $(0, -13)$
- B)  $(0, 0)$
- C)  $(0, 3)$
- D)  $(0, 19)$

13

Which linear equation has exactly one solution?

- A)  $y = 5 - y$
- B)  $y = y - 5$
- C)  $y = y + 5$
- D)  $y + 5 = 5 + y$

12

$$f(x) = x^2 + 4x + 4$$

For the given function  $f$ , what is the minimum value of  $f(x)$ ?

- A) 4
- B) 2
- C) 1
- D) 0

TestDaily

CONTINUE

3

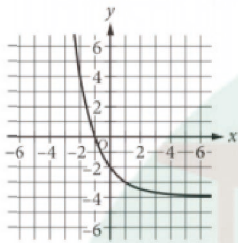


3

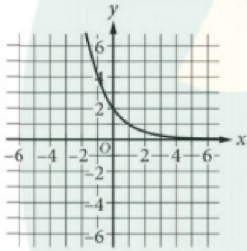
14

What is the graph of  $y = 4 - 2(0.5)^x$ ?

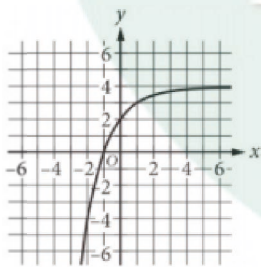
A)



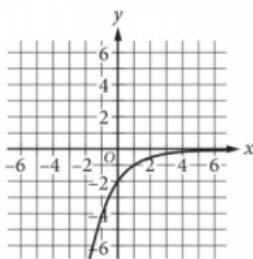
B)



C)



D)



15

$$x^2 - 6x + y^2 - 8y = 0$$

The graph of the given equation in the  $xy$ -plane is a circle. What is the radius of the circle?

A) 2

B) 3

C) 4

D) 5

CONTINUE

3



3

**DIRECTIONS**

For questions 16-20, solve the problem and enter your answer in the grid, as described below, on the answer sheet.

- Although not required, it is suggested that you write your answer in the boxes at the top of the columns to help you fill in the circles accurately. You will receive credit only if the circles are filled in correctly.
- Mark no more than one circle in any column.
- No question has a negative answer.
- Some problems may have more than one correct answer. In such cases, grid only one answer.
- Mixed numbers** such as  $3\frac{1}{2}$  must be gridded as 3.5 or 7/2. (If  $3\frac{1}{2}$  is entered into the grid, it will be interpreted as  $\frac{31}{2}$ , not  $3\frac{1}{2}$ .)
- Decimal answers:** If you obtain a decimal answer with more digits than the grid can accommodate, it may be either rounded or truncated, but it must fill the entire grid.

Write answer in boxes. →

Grid in result. {

Answer:  $\frac{7}{12}$

7	/	1	2
○	○	○	○
○	○	○	○
①	①	○	①
②	②	②	○
③	③	③	③
④	④	④	④
⑤	⑤	⑤	⑤
⑥	⑥	⑥	⑥
○	⑦	⑦	⑦
⑧	⑧	⑧	⑧
⑨	⑨	⑨	⑨

← Fraction line

Answer: 2.5

2	.	5
○	○	○
○	○	○
①	①	①
②	○	②
③	③	③
④	④	④
⑤	⑤	○
⑥	⑥	⑥
⑦	⑦	⑦
⑧	⑧	⑧
⑨	⑨	⑨

← Decimal point

Acceptable ways to grid  $\frac{2}{3}$  are:

2	/	3
○	○	○
○	○	○
①	①	①
②	○	②
③	③	○
④	④	④
⑤	⑤	⑤
⑥	⑥	⑥
⑦	⑦	⑦
⑧	⑧	⑧
⑨	⑨	⑨

.	6	6	6
○	○	○	○
○	○	○	○
①	①	①	①
②	②	②	②
③	③	③	③
④	④	④	④
⑤	⑤	⑤	⑤
⑥	○	○	○
⑦	⑦	⑦	⑦
⑧	⑧	⑧	⑧
⑨	⑨	⑨	⑨

.	6	6	7
○	○	○	○
○	○	○	○
①	①	①	①
②	②	②	②
③	③	③	③
④	④	④	④
⑤	⑤	⑤	⑤
⑥	○	○	○
⑦	⑦	⑦	○
⑧	⑧	⑧	⑧
⑨	⑨	⑨	⑨

Answer: 201 – either position is correct

2	0	1
○	○	○
○	○	○
①	①	○
②	○	②
③	③	③

2	0	1	
○	○	○	○
○	○	○	○
①	①	○	①
②	○	②	②
③	③	③	③

**NOTE:** You may start your answers in any column, space permitting. Columns you don't need to use should be left blank.

CONTINUE

3



3

16

$$|x+1| = 5$$

What positive value of  $x$  satisfies the given equation?

18

$$\frac{3x}{2} + 4 = 13$$

What value of  $x$  satisfies the given equation?

17

In the triangle  $RST$ , angle  $T$  measures 40 degrees and angle  $R$  measures 20 degrees. What is the measure, in degrees, of angle  $S$ ?

TestDaily

CONTINUE

3



3

19

$$\sqrt{14-2x} = x-7$$

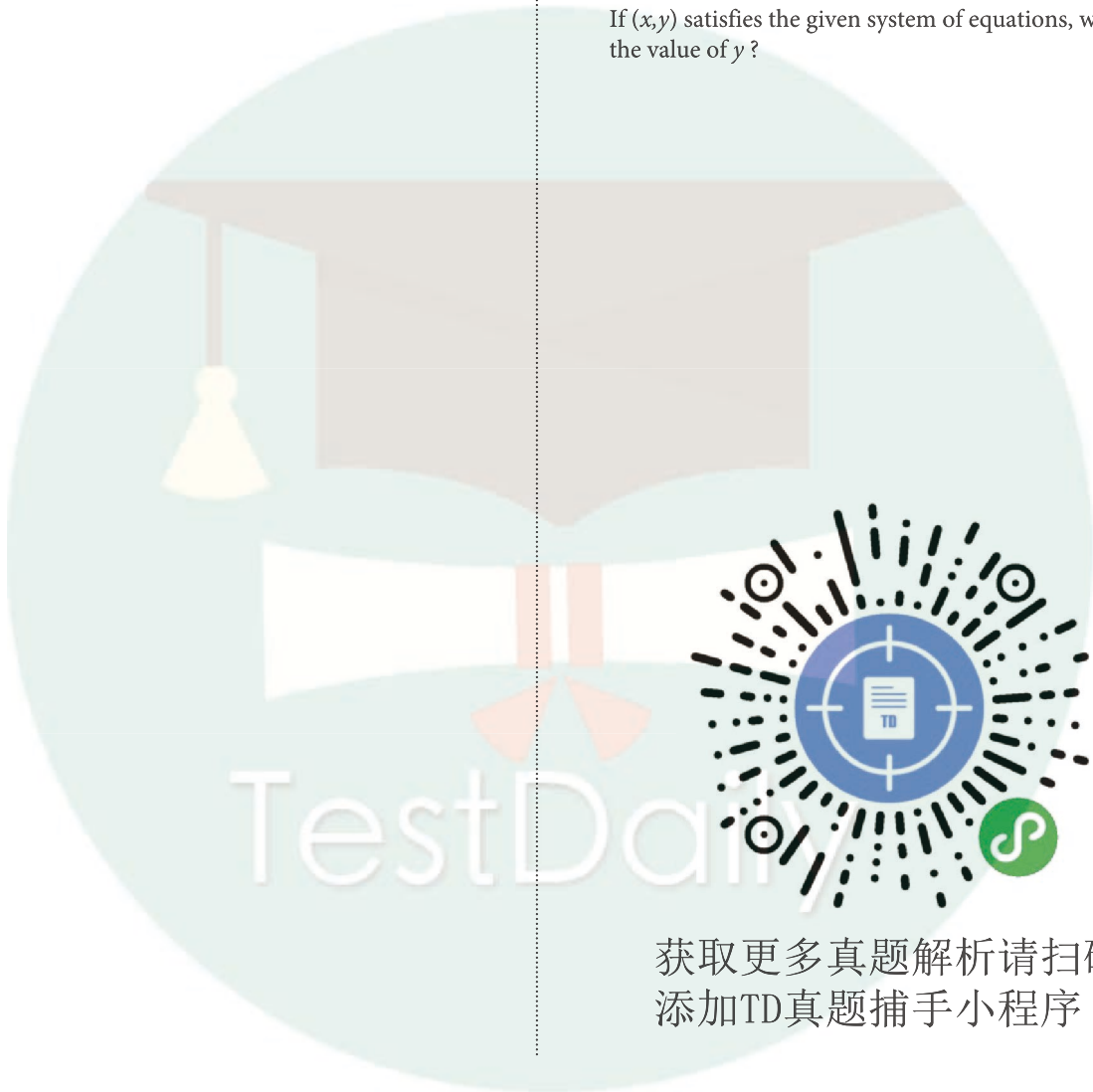
What value of  $x$  satisfies the equation shown?

20

$$2x + 7y = 4$$

$$8x + 4y = 12$$

If  $(x,y)$  satisfies the given system of equations, what is the value of  $y$ ?



获取更多真题解析请扫码  
添加TD真题捕手小程序

**STOP**

**If you finish before time is called, you may check your work on this section only.  
Do not turn to any other section.**



4



4

## Math Test – Calculator

55 MINUTES, 38 QUESTIONS

Turn to Section 4 of your answer sheet to answer the questions in this section.

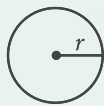
### DIRECTIONS

For questions 1–30, solve each problem, choose the best answer from the choices provided, and fill in the corresponding circle on your answer sheet. For questions 31–38, solve the problem and enter your answer in the grid on the answer sheet. Please refer to the directions before question 31 on how to enter your answers in the grid. You may use any available space in your test booklet for scratch work.

### NOTES

1. The use of a calculator **is permitted**.
2. All variables and expressions used represent real numbers unless otherwise indicated.
3. Figures provided in this test are drawn to scale unless otherwise indicated.
4. All figures lie in a plane unless otherwise indicated.
5. Unless otherwise indicated, the domain of a given function  $f$  is the set of all real numbers  $x$  for which  $f(x)$  is a real number.

### REFERENCE

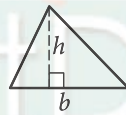


$$A = \pi r^2$$

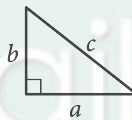
$$C = 2\pi r$$



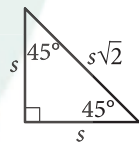
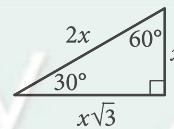
$$A = \ell w$$



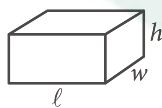
$$A = \frac{1}{2}bh$$



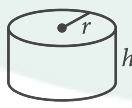
$$c^2 = a^2 + b^2$$



Special Right Triangles



$$V = \ell wh$$



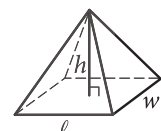
$$V = \pi r^2 h$$



$$V = \frac{4}{3}\pi r^3$$



$$V = \frac{1}{3}\pi r^2 h$$



$$V = \frac{1}{3}\ell wh$$

The number of degrees of arc in a circle is 360.

The number of radians of arc in a circle is  $2\pi$ .

The sum of the measures in degrees of the angles of a triangle is 180.

CONTINUE

4



4

1

$$20d + 0.7m = 235$$

Shelly spent \$235 to rent a moving van. The equation above shows the relationship between the number of days she rented the van,  $d$ , and the number of miles she drove the van,  $m$ . If she rented the van for 3 days, how many miles did she drive the van?

- A) 118
- B) 250
- C) 307
- D) 421

2

$$x = 3$$

$$y = x + 3$$

What is the solution  $(x,y)$  to the given system of equations?

- A) (3, 6)
- B) (3, 3)
- C) (3, -3)
- D) (3, -6)

3

$$f(x) = -0.5x + 56$$

The given function models the average daily temperature  $f(x)$ , in degrees Fahrenheit ( $^{\circ}\text{F}$ ), in Chicago  $x$  days after November 1, for  $0 \leq x \leq 29$ . Based on this model, what is the average daily temperature, in  $^{\circ}\text{F}$ , in Chicago 6 days after November 1?

- A) 62
- B) 60
- C) 56
- D) 53

TestDaily

CONTINUE

4



4

4

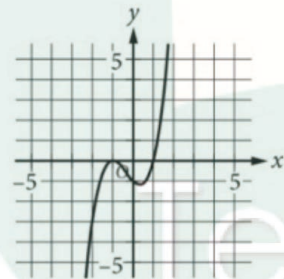
$x$	$f(x)$
-2	0
-1	0
0	-2
1	0

The table gives some values of  $x$  and their corresponding values of  $f(x)$ . Which of the following graphs could be the graph of  $y = f(x)$  in the  $xy$ -plane?

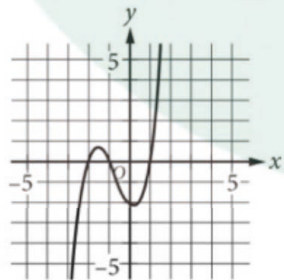
A)



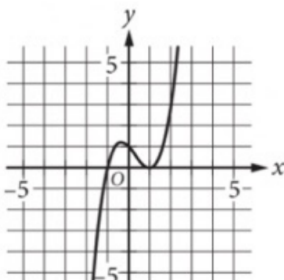
B)



C)



D)



5

What percentage of 40 is 15?

- A) 62.5%
- B) 37.5%
- C) 32.5%
- D) 2.70%

6

An automobile uses 27 pints of fuel for every 63 miles traveled. How many pints of fuel does the automobile use to travel 7 miles?

- A) 16
- B) 9
- C) 4
- D) 3

CONTINUE

4



4

7

How many fluid ounces are equivalent to 40 cups of liquid ? (8 fluid ounces = 1)

- A) 0.2
- B) 5.0
- C) 48.0
- D) 320.0

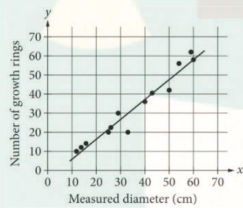
9

For how many of the trees in the sample is the number of growth rings greater than the number predicted by the line of best fit ?

- A) 3
- B) 4
- C) 6
- D) 10

8

Questions 8 and 9 refer to the following information.



For a sample of 13 red alder trees, an arborist measured each tree's diameter, in centimeters (cm), at a height of 1.4 meters. The arborist then counted the number of growth rings at this height. Each point in the scatterplot represents the diameter and number of rings for each tree. A line of best fit for these data is also shown.

A red alder tree will be selected at random from the sample. What is the probability that the selected tree will have a measured diameter that is greater than 30 cm ?

- A)  $\frac{1}{7}$
- B)  $\frac{6}{13}$
- C)  $\frac{7}{13}$
- D)  $\frac{6}{7}$

CONTINUE

4



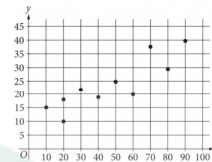
4

10

The volume of a neodymium magnet is 2.50 cubic centimeters, and its mass is 18.5 grams. What is the density, in grams per cubic centimeter, of the magnet?

- A) 0.140
- B) 7.40
- C) 16.0
- D) 46.3

12



The scatterplot shows 10 values from a data set. Which of the following equations is the most appropriate linear model for the data shown?

- A)  $y = 9 + \frac{3}{10}x$
- B)  $y = 9 - \frac{3}{10}x$
- C)  $y = \frac{6}{5}x$
- D)  $y = \frac{3}{8}x$

11

0, 2, 3, 4, 5, 5, 5, 6, 6, 7

The given list shows a baseball team's score for each of its first 10 games. In the eleventh game, the team had a score of 18. Which of the following best describes the mean and median of the team's scores for the first 11 games compared to the first 10 games?

- A) The mean increased and the median remained unchanged.
- B) The median increased and the mean remained unchanged.
- C) Both the mean and the median remained unchanged.
- D) Both the mean and the median increased.

13

Triangles ABC and DEF each have a corresponding angle measuring  $40^\circ$ . Which additional piece of information is sufficient to determine whether these two triangles are similar?

- A) The length of line segment AC
- B) The length of line segment DE
- C) The measure of another pair of corresponding angles in the two triangles
- D) The lengths of one pair of corresponding sides in the two triangles

CONTINUE

4



4

14

If  $3\left(\frac{x}{5} + \frac{1}{2}\right) + 1 = 10$ , what is the value of  $\frac{x}{5} + \frac{1}{2}$ ?

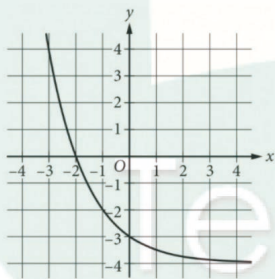
- A) 1
- B) 3
- C) 6
- D) 12

16

The half-life of the radioactive isotope iodine-131 is approximately 8 days, which means that at the end of each 8-day time interval only half of the mass of the isotope that was present at the beginning of the time interval remains. Which of the following best describes how the amount of iodine-131 changes over time?

- A) It increases linearly.
- B) It decreases linearly.
- C) It increases exponentially.
- D) It decreases exponentially.

15



The graph of the exponential function  $f$  is shown. For what value of  $x$  is  $f(x) = 0$ ?

- A) -4
- B) -3
- C) -2
- D) -1

CONTINUE

4



4

17

In the  $xy$ -plane, a circle with radius 2 has center  $(0,0)$ . Which of the following is an equation of the circle?

- A)  $x^2 + y^2 = 2$
- B)  $x^2 + y^2 = 4$
- C)  $x^2 - y^2 = 2$
- D)  $x^2 - y^2 = 4$

18

$$x^2 + 2x - 3 = 0$$

If  $x$  satisfies the given equation, which of the following could be a value of  $x+3$ ?

- A) -4
- B) -2
- C) 0
- D) 2



TestDaily

CONTINUE

4



4

19

Phone Survey

Age group(in years)	Agree	Disagree	Total
18-29	113	109	222
30-44	126	136	262
45-64	145	201	346
65 and up	68	102	170
Total	452	548	1,000

The table shows the results of a poll of 1,000 people. Respondents were asked to agree or disagree with the statement "I rely too much on my phone." If a respondent who was selected at random disagrees with the statement, which of the following is closest to the probability that the respondent selected is at least 45 years old ?

- A) 0.37
- B) 0.45
- C) 0.49
- D) 0.55

20

$x$	-1	0	1	2
$y$	$-2k-2$	0	$2k+2$	$4k+4$

The table above shows several values of  $x$  and their corresponding values of  $y$ , where  $k$  is a nonzero constant. If the relationship between  $x$  and  $y$  is linear, which of the following defines this relationship ?

- A)  $y = 2x(k + 1)$
- B)  $y = kx$
- C)  $y = -2kx$
- D)  $y = -2k - x - 1$

TestDaily

CONTINUE



4



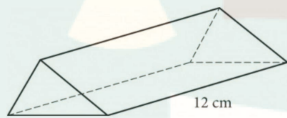
4

21

Object A has a mass of  $x$  kilograms (kg).  
Object B has a mass of  $1.1x$  kg. What is  
the ratio of the mass of object A to the  
mass of object B?

- A) 1 to 1
- B) 1 to 11
- C) 10 to 1
- D) 10 to 11

22

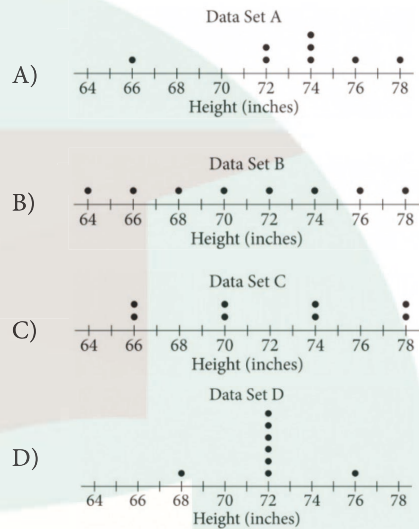


The volume of the right triangular prism shown is 96  
cubic centimeters ( $\text{cm}^3$ ). What is the area, in  $\text{cm}^2$ , of  
one of the triangular bases of the prism?

- A) 4
- B) 8
- C) 16
- D) 42

23

The dot plots show the distribution of heights, in  
inches, of members from four basketball teams. Of  
the data sets summarized by the dot plots, which has  
the smallest standard deviation?



24

Sanjay works as a teacher's assistant for \$20 per hour  
and tutors privately for \$25 per hour. Last week, he  
made at least \$100 working  $x$  hours as a teacher's  
assistant and  $y$  hours as a private tutor. Which of the  
following inequalities models this situation?

- A)  $4x + 5y \geq 25$
- B)  $4x + 5y \geq 20$
- C)  $5x + 4y \geq 25$
- D)  $5x + 4y \geq 20$

CONTINUE

4



4

25

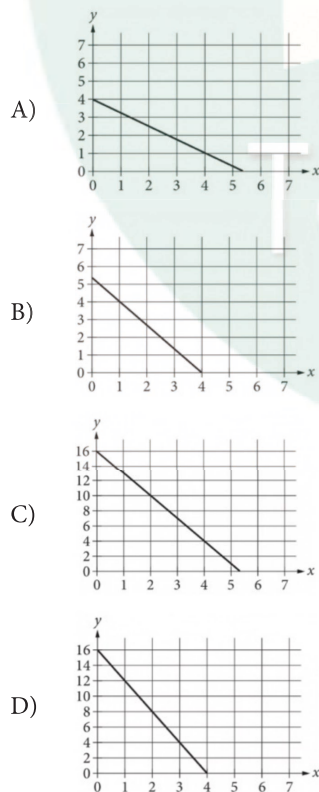
The total cost  $C$ , in dollars, to tile a square floor is represented by the equation  $C = 16L^2$ , where  $L$  is the length of one side of the floor, in feet. Which of the following represents the cost, in dollars per square foot, to tile the floor?

- A)  $L$
- B) 4
- C) 16
- D)  $16L$

26

$$3x + 4y = 16$$

The given equation models the number of 3-credit-hour courses,  $x$ , and the number of 4-credit-hour courses,  $y$ , that Camila can take for a total of 16 credit hours next semester. Which graph models this relationship?



27

The interstate route from Los Angeles, California, to Jacksonville, Florida, cost about \$5 billion total to build and has a total distance of about 2,500 miles. Each mile of the interstate route cost about \$2 million to build. If the linear relationship between the distance  $x$ , in thousands of miles, and the cost  $y$ , in billions of dollars, is represented in the  $xy$ -plane, what is the  $y$ -intercept of the graph?

- A)  $(0,0)$
- B)  $(0,200,000)$
- C)  $(200,000,0)$
- D)  $(200,000,200,00)$

CONTINUE

4



4

28

The populations, in thousands, of Alaska and Hawaii from 1960 to 2015 can be modeled by the functions  $A$  and  $H$ , where  $x$  is the number of years since January 1, 1960, and  $0 \leq x \leq 55$ .

$$\begin{aligned} \text{Alaska: } A(x) &= 221 + 9.78x \\ \text{Hawaii: } H(x) &= 645 + 14.5x \end{aligned}$$

Based on the model, what is the predicted population of Alaska on January 1, 1960?

- A) 9.78
- B) 221
- C) 9,780
- D) 221,000

29

The populations, in thousands, of Alaska and Hawaii from 1960 to 2015 can be modeled by the functions  $A$  and  $H$ , where  $x$  is the number of years since January 1, 1960, and  $0 \leq x \leq 55$ .

$$\begin{aligned} \text{Alaska } A(x) &= 221 + 9.78x \\ \text{Hawaii: } H(x) &= 645 + 14.5x \end{aligned}$$

Based on the model, in which year does the predicted population of Hawaii first exceed 900,000?

- A) 1966
- B) 1967
- C) 1976
- D) 1977

30

A psychologist conducting a memory experiment provided participants with a list of three-letter sequences. Immediately after the experiment, the participants remembered 100% of the sequences. The psychologist found that the percentage of sequences the participants remembered decreased by 30% for every 3-second interval that passed. Which function best models this situation, where  $P$  is the percentage of sequences the participants remembered, and  $t$  is the time, in seconds, that passed?

- A)  $P(t) = 100(0.30)^{3t}$
- B)  $P(t) = 100(0.30)^t$
- C)  $P(t) = 100(0.70)^{\frac{t}{3}}$
- D)  $P(t) = 100(0.70)^t$

CONTINUE

4



4

**DIRECTIONS**

For questions 31-38, solve the problem and enter your answer in the grid, as described below, on the answer sheet.

- Although not required, it is suggested that you write your answer in the boxes at the top of the columns to help you fill in the circles accurately. You will receive credit only if the circles are filled in correctly.
- Mark no more than one circle in any column.
- No question has a negative answer.
- Some problems may have more than one correct answer. In such cases, grid only one answer.
- Mixed numbers** such as  $3\frac{1}{2}$  must be gridded as 3.5 or  $7/2$ . (If  $3\frac{1}{2}$  is entered into the grid, it will be interpreted as  $\frac{31}{2}$ , not  $3\frac{1}{2}$ .)
- Decimal answers:** If you obtain a decimal answer with more digits than the grid can accommodate, it may be either rounded or truncated, but it must fill the entire grid.

Write answer in boxes.

Grid in result.

Answer:  $\frac{7}{12}$

7	/	1	2
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

← Fraction line

Answer: 2.5

	2	.	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

← Decimal point

Acceptable ways to grid  $\frac{2}{3}$  are:

	2	/	3
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

.	6	6	6
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

.	6	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

Answer: 201 – either position is correct

	2	0	1
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

2	0	1	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

**NOTE:** You may start your answers in any column, space permitting. Columns you don't need to use should be left blank.

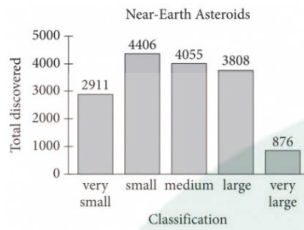
CONTINUE

4



4

31



The bar graph shows the number of discovered near-Earth asteroids, by classification, as of April 2017. Of the near-Earth asteroids, how many more are classified as medium, large, or very large than are classified as very small or small?

32

$$x^2 - 4x - 9 = 0$$

The solutions to the given equation can be written in the form  $\frac{m \pm \sqrt{k}}{2}$ , where  $m$  and  $k$  are integers. What is the value of  $m + k$ ?

TestDaily

CONTINUE

4



4

33

What is the result of increasing 300 by 200%?

34

$$y = \frac{3}{2}x - \frac{1}{2}$$

$$y = \frac{k}{3}x + \frac{1}{3}$$

In the system of equations above,  $k$  is a constant. If the system has no solutions, what is the value of  $k$ ?



TestDaily

CONTINUE

4



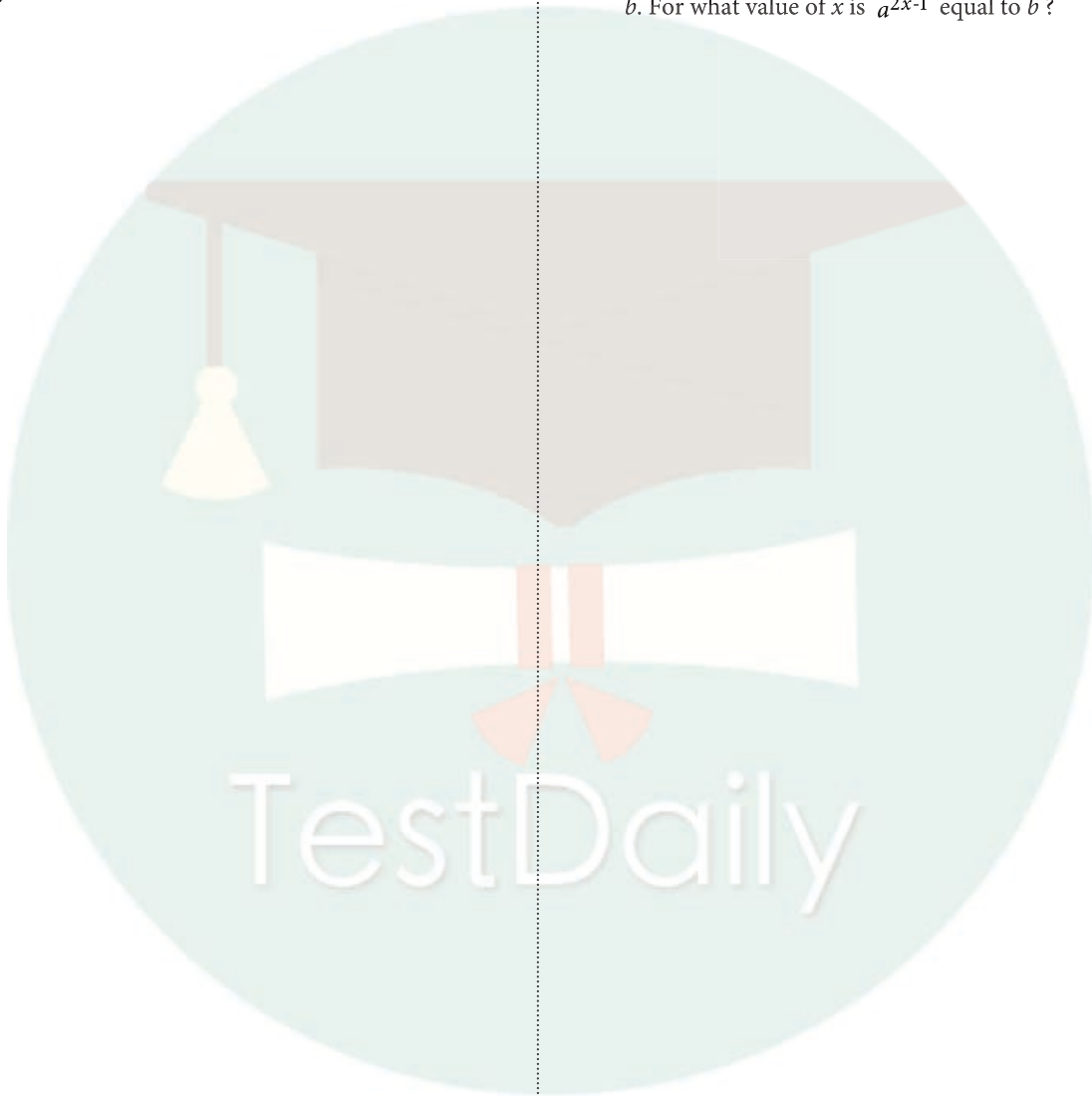
4

35

The expression  $0.6y$  represents the result of decreasing the quantity  $y$  by  $p\%$ . What is the value of  $p$ ?

36

Two numbers,  $a$  and  $b$ , are each greater than zero, and the square root of  $a$  is equal to the cube root of  $b$ . For what value of  $x$  is  $a^{2x-1}$  equal to  $b$ ?



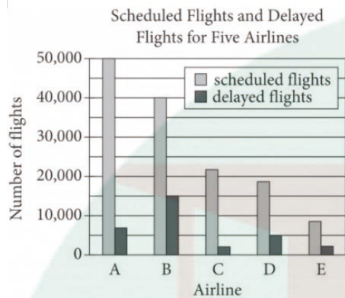
CONTINUE

4



4

Questions 37 and 38 refer to the following information.



The bar graph above shows the total number of scheduled flights and the number of delayed flights for five airlines in a one-month period. Values have been rounded to the nearest 1000 flights.

37

According to the graph, what is the median number of delayed flights for the airlines shown?

38

According to the graph, for the airline with the greatest number of delayed flights, what fraction of the total number of scheduled flights for the airline were delayed?



获取更多真题解析请扫码  
添加TD真题捕手小程序

**STOP**

If you finish before time is called, you may check your work on this section only.  
Do not turn to any other section.