

# Test 1—Math

## Module 1

**DIRECTIONS**

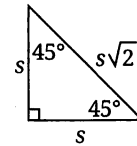
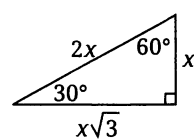
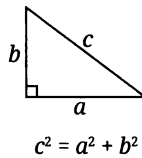
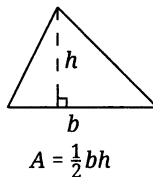
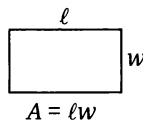
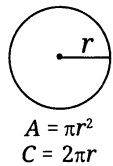
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**NOTES**

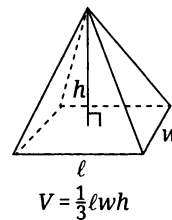
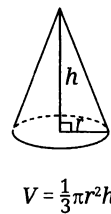
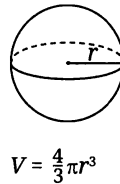
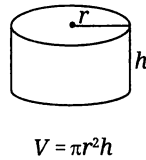
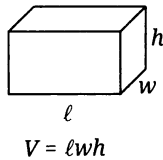
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**REFERENCE**



**Special Right Triangles**



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**

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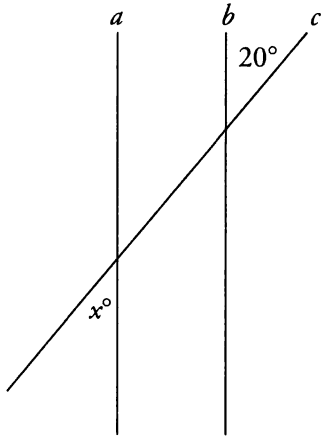
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- Don't enter **symbols** such as a percent sign, comma, or dollar sign in your answer.

**CONTINUE** 

## Section 2, Module 1: Math

1  Mark for Review



Note: Figure not drawn to scale.

In the figure shown, if line  $a$  is parallel to line  $b$ , what is the value of  $x$ ?

(A) 20

(B) 70

(C) 120

(D) 160

2  Mark for Review

12, 12, 12, 17, 5, 8, 2, 10, 3, 11, 19, 9

The data set shown represents the masses, in grams, of different bacteria samples. What is the mean mass, in grams, of these bacteria samples?

3  Mark for Review

Which of the following equations has the same solution as  $5a - 9 = 36$ ?

(A)  $5a = -324$

(B)  $5a = 4$

(C)  $5a = 27$

(D)  $5a = 45$

4  Mark for Review

What is the edge length, in inches, of a cube with a volume of 729 cubic inches?

(A) 9

(B) 27

(C) 121.5

(D) 182.25

5  Mark for Review

If  $33\frac{1}{3}\%$  of  $x$  is 29, what is the value of  $x$ ?

CONTINUE 

## 6 Mark for Review

The number of short songs,  $s$ , and long songs,  $l$ , that a singer practices in a day is given by the equation  $3s + 4.5l = 108$ . If the singer practices 15 short songs on a particular day, how many long songs does the singer practice that day?

(A) 4.5

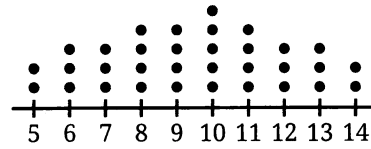
(B) 14

(C) 67.5

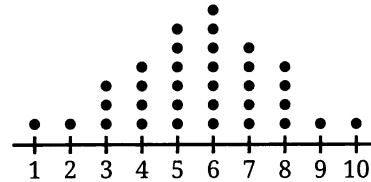
(D) 108

## 7 Mark for Review

First Floor



Second Floor



Each of the dot plots shown represents the number of books found on each bookshelf for two floors of a library. What statement best compares the standard deviations of the number of books on each bookshelf for these two floors?

(A) There is not enough information to compare these standard deviations.

(B) The standard deviation of the number of books found on each bookshelf for the first floor is equal to the standard deviation of the number of books found on each bookshelf for the second floor.

(C) The standard deviation of the number of books found on each bookshelf for the first floor is less than the standard deviation of the number of books found on each bookshelf for the second floor.

(D) The standard deviation of the number of books found on each bookshelf for the first floor is greater than the standard deviation of the number of books found on each bookshelf for the second floor.

CONTINUE 

## Section 2, Module 1: Math

8  Mark for Review

A truck is worth \$60,500 at the beginning of January. A model predicts that the value of the truck,  $v$ , will decrease by 12% each month of the coming year. Which equation best represents this model, where  $t$  is the number of months after January, for  $t \leq 12$ ?

(A)  $v = 0.88(60,500)^t$

(B)  $v = 1.12(60,500)^t$

(C)  $v = 60,500(0.88)^t$

(D)  $v = 60,500(1.12)^t$

9  Mark for Review

If  $9a^2 = 20a + 21$  and  $a < 0$ , what is the value of  $a$ ?

(A)  $-20$

(B)  $-3$

(C)  $-\frac{20}{9}$

(D)  $-\frac{7}{9}$

10  Mark for Review

The function  $h(x) = 12c^x$  is an exponential function, and  $c$  is a positive constant. If  $h(5) = 12,288$ , what is the value of  $h(4)$ ?

11  Mark for Review

$$y = -7x - 21$$
$$y = (x + 3)(x - 4)$$

Which of the following is the solution to the given system of equations?

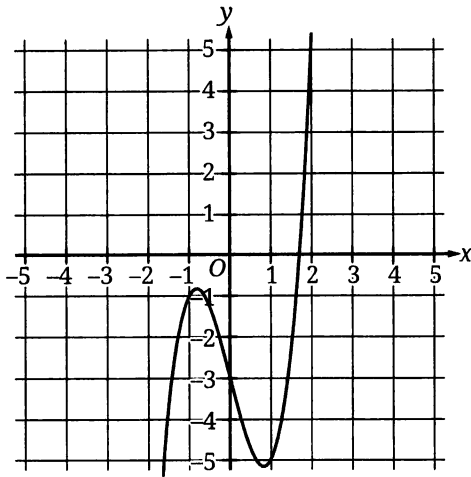
(A)  $(0, -3)$

(B)  $(-3, 0)$

(C)  $(-3, 4)$

(D)  $(4, -3)$

CONTINUE 

12  Mark for Review

The graph of  $y = f(x)$  for the function  $f(x) = ax^3 + cx + d$  is shown. In the function,  $a$ ,  $c$ , and  $d$  are constants. How many values of  $x$  satisfy  $f(x) = 0$ ?

 (A) One

 (B) Two

 (C) Three

 (D) Four
13  Mark for Review

The amount of money in a bank account is represented by  $g(m)$  in the equation  $g(m) = 35,000(1.1)^{\frac{m}{12}}$ . The variable  $m$  represents the number of months after the initial deposit. How long, in months, does it take for the amount of money in the account to increase by 10%?

14  Mark for Review

Triangles  $ABC$  and  $DEF$  are similar triangles. Angles  $A$  and  $D$  are right angles, and angle  $B$  corresponds to angle  $E$ . If  $\cos(C) = \frac{23}{265}$ , what is the value of  $\cos(F)$ ?

 (A)  $\frac{23}{265}$ 
 (B)  $\frac{264}{265}$ 
 (C)  $\frac{265}{264}$ 
 (D)  $\frac{265}{23}$ 
15  Mark for Review

What is the slope of line  $a$  if line  $a$  is perpendicular to line  $b$ , defined as  $9x = 3y - 6$ ?



## Section 2, Module 1: Math

**16**  Mark for Review

The measure of angle  $AOB$  in a circle with center  $O$  is  $85^\circ$ . What is the measure of the associated minor arc  $AB$ , in degrees?

**17**  Mark for Review

$$a = \frac{b+1}{c-1}$$

The given equation relates the variables  $a$ ,  $b$ , and  $c$ , where  $a$ ,  $b$ , and  $c$  are all greater than 0. Which equation expresses  $c - 1$  in terms of  $a$  and  $b$ ?

(A)  $c - 1 = \frac{a}{b+1}$

(B)  $c - 1 = a(b + 1)$

(C)  $c - 1 = \frac{b+1}{a}$

(D)  $c - 1 = (b + 1) - a$

**18**  Mark for Review

For all positive values of  $x$ , the function  $b$  is defined as  $b(x)$  equals 33% of  $x$ . The function could be described as which of the following?

(A) Increasing linear

(B) Increasing exponential

(C) Decreasing linear

(D) Decreasing exponential

**19**  Mark for Review

Function  $a$  is defined by  $a(x) = -2x^2 - 16x + 7.5$ , and function  $b$  is defined by  $b(x) = a(x - 7)$ . What is the value of  $x$  when  $b(x)$  is at its maximum?

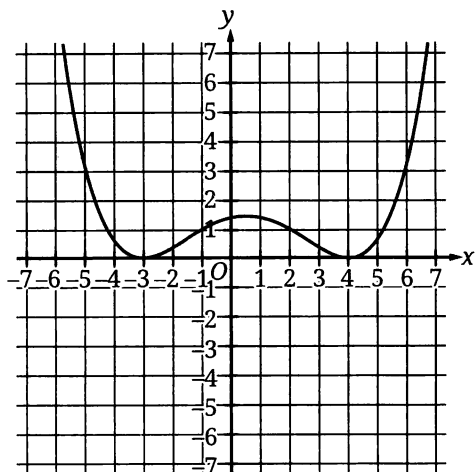
(A) -11

(B) -4

(C) 3

(D) 7

**CONTINUE** 

20  Mark for Review

Which of the following equations could represent the graph shown in the  $xy$ -plane?

(A)  $y = \frac{1}{100}(x-3)(x+4)$

(B)  $y = \frac{1}{100}(x+3)(x-4)$

(C)  $y = \frac{1}{100}(x+3)^2(x-4)^2$

(D)  $y = \frac{1}{100}(x+3)(x-4)^2$

21  Mark for Review

A parabola with the equation  $y = x^2 - 2x + 16$  is graphed in the  $xy$ -plane. A line with the equation  $y = -6x - k$ , where  $k$  is a constant, intersects the parabola at exactly one point. What is the  $x$ -coordinate at the point of intersection?

(A) -12

(B) -2

(C) 2

(D) 12

22  Mark for Review

Ounces of Flour per Industrial Batch

Cookies	240
Cupcakes	464

A baker has an order to make an equal number of industrial batches of cookies and cupcakes and requires 704 ounces of flour to make one batch each of cookies and cupcakes. The table displays the amounts of flour used, in ounces, for each batch. If the baker needs 4,928 ounces of flour for this order and plans to make equal batches of cupcakes and cookies, how much more flour, in ounces, will be used for cupcakes than for cookies?

(A) 7

(B) 224

(C) 1,568

(D) 4,224

## YIELD

Once you've finished (or run out of time for) this section, use the answer key to determine how many questions you got right. If you got fewer than 14 questions right, move on to Module 2—Easier, otherwise move on to Module 2—Harder.



# Test 1—Math

## Module 2—Easier

### DIRECTIONS

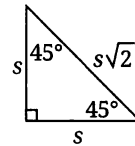
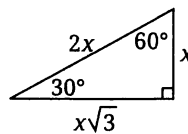
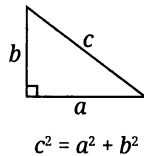
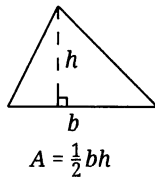
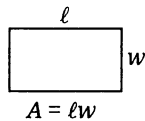
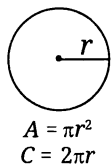
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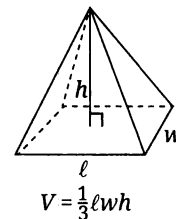
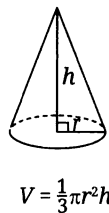
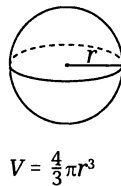
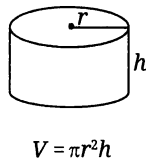
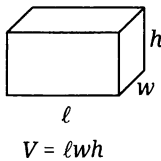
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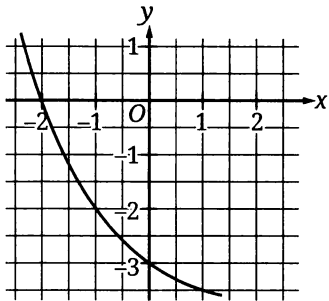
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**CONTINUE** 

Section 2, Module 2—Easier: Math

1 Mark for Review



For the graph shown, what is the  $x$ -intercept?

(A)  $(-2, 0)$

(B)  $(-3, 0)$

(C)  $(0, -2)$

(D)  $(0, -3)$

2 Mark for Review

In the equation  $a - 18 = 252$ , what is the value of  $a$ ?

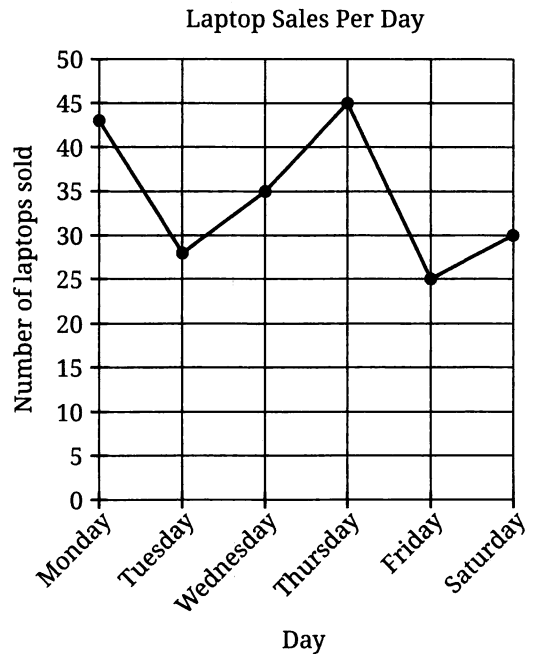
(A) 14

(B) 234

(C) 270

(D) 4,536

3 Mark for Review



The chart shows laptop sales per day for the second week in October. Which day had the least number of laptops sold?

(A) Monday

(B) Tuesday

(C) Thursday

(D) Friday

4 Mark for Review

What is the measure of an angle, in degrees, if it measures  $\frac{9\pi}{10}$  radians?

**CONTINUE**

**5**  Mark for Review

If a stone weighs 350 centigrams, what is its weight in grams?  
(1 gram = 100 centigrams)

(A) 0.35

(B) 3.5

(C) 35

(D) 3,500

**6**  Mark for Review

Each day, a certain computer completes 651 simulations of the same length. If the computer performs at a constant rate, which of the following equations represents the number of days,  $d$ , it will take the computer to perform  $s$  simulations?

(A)  $d = \frac{s}{651}$

(B)  $d = 651 - s$

(C)  $d = 651 + s$

(D)  $d = 651s$

**7**  Mark for Review

Wendy planted 6 rose bushes, each with the same number of flowers. After deer came into the yard and ate 12 of the flowers, there were 18 flowers remaining. How many flowers were originally on each rose bush?

**8**  Mark for Review

$$b = 2a - 17$$

If  $a = 5$  in the given equation, what is the value of  $b$ ?

**9**  Mark for Review

Which of the following equations represents the statement 27 is 7 less than 2 times the number  $y$ ?

(A)  $27 = 2y - 7$

(B)  $27 = (2)(7)y$

(C)  $27 - 7 = 2y$

(D)  $27 = 7y - 2$

**10**  Mark for Review

For the equation  $|30 - y| = 16$ , what is one possible value of  $y$ ?

**CONTINUE** 

## Section 2, Module 2—Easier: Math

11 Mark for Review

Which of the following expressions is equivalent to  $(y^2 - 5y + 10) + (3y^2 + 2y + 3)$ ?

(A)  $3y^2 - 3y + 13$

(B)  $3y^2 + 7y + 10$

(C)  $4y^2 - 3y + 13$

(D)  $4y^2 - 7y + 13$

12 Mark for Review

$$7y^2 - 14y$$

Which of the following expressions is equivalent to the given expression?

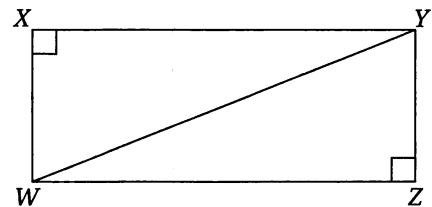
(A)  $y(7y - 2)$

(B)  $7y(y - 2)$

(C)  $14y(7y - 1)$

(D)  $y^2(7y - 14)$

13 Mark for Review



Note: Figure not drawn to scale.

In rectangle  $WXYZ$ ,  $WY = 25$  and  $WX = 13$ . Which expression represents the length of side  $XY$ ?

(A)  $\sqrt{25 - 13}$

(B)  $25 - 13$

(C)  $\sqrt{(25)(13)}$

(D)  $\sqrt{25^2 - 13^2}$

14 Mark for Review

$$\begin{aligned} y &= 3x \\ x - y &= 14 \end{aligned}$$

For the given system of equations, what is the solution  $(x, y)$ ?

(A)  $(-8, -24)$

(B)  $(-7, -21)$

(C)  $(-6, -18)$

(D)  $(-5, -15)$

**CONTINUE**

15  Mark for Review

$x$	-2	0	2	4
$g(x)$	27	17	7	-3

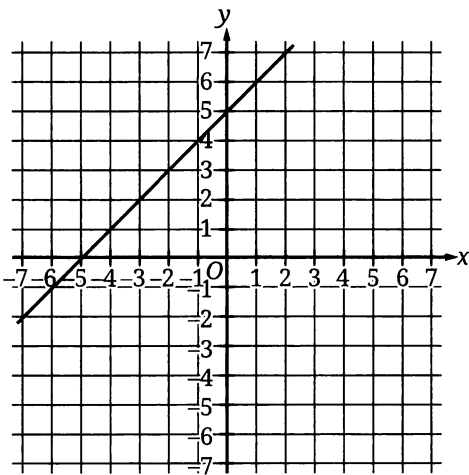
The table shows four values of  $x$  and their corresponding values of  $g(x)$ . If  $g(x)$  is a linear function, which of the following equations defines  $g(x)$ ?

(A)  $g(x) = -17x - 7$

(B)  $g(x) = -10x + 17$

(C)  $g(x) = -5x + 17$

(D)  $g(x) = -2x + 27$

16  Mark for Review

Which of the following could be the equation of the graph shown?

(A)  $y = -\frac{1}{2}x + 5$

(B)  $y = -x + 5$

(C)  $y = \frac{1}{2}x + 5$

(D)  $y = x + 5$

17  Mark for Review

$$q(x) = \frac{1}{9}x^4$$

The function  $q$  is defined by the given equation. For what value of  $x$  does  $q(x) = 9$ ?

(A)  $\frac{1}{9}$

(B) 3

(C)  $\frac{81}{4}$

(D) 81

18  Mark for Review

What is the area, in square inches, of a square with a side length of 14 inches?


**CONTINUE**

## Section 2, Module 2—Easier: Math

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19  Mark for Review

In order to make enough french fries for one week at an amusement park, a fry cook needs to have at least 2,500 pounds of potatoes. He already has 260 pounds of potatoes in the kitchen and is expecting more sacks of potatoes to be delivered. If each sack of potatoes in the delivery contains 15 pounds of potatoes, which of the following is the minimum number of sacks of potatoes the fry cook needs in order to make enough french fries for the week?

(A) 149

(B) 150

(C) 166

(D) 167

20  Mark for Review

$$6x - 11y = 242$$

What is the  $y$ -intercept of the line when the given equation is graphed in the  $xy$ -plane?

(A) (0, -22)

(B) (0, -11)

(C) (0, 11)

(D) (0, 22)

**CONTINUE** 

21

 Mark for Review

In triangles  $PQR$  and  $STU$ , the measures of angles  $P$  and  $S$  are each  $13^\circ$ , and the measures of angles  $Q$  and  $T$  are each  $130^\circ$ . If sides  $PQ$  and  $ST$  have the same length, which additional piece of information is sufficient to prove that triangle  $PQR$  is congruent to triangle  $STU$ ?

(A) No additional information is needed.

(B) The measure of angle  $R$

(C) The length of side  $ST$

(D) The lengths of sides  $QR$  and  $TU$

22

 Mark for Review

A book that is 280 pages long is divided into two sections, one with  $p$  pages and the other with  $q$  pages. If the number of pages in the section with  $p$  pages is 8 less than 3 times the number of pages in the section with  $q$  pages, how many pages are in the section with  $p$  pages?

(A) 91

(B) 96

(C) 182

(D) 208

**STOP**

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



# Test 1—Math

## Module 2—Harder

### DIRECTIONS

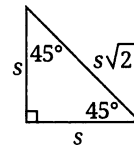
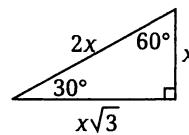
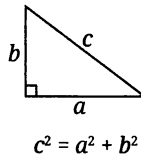
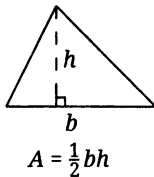
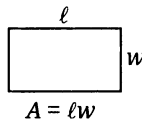
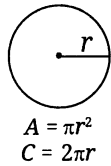
The questions in this section address a number of important math skills. Use of a calculator is permitted for all questions.

### NOTES

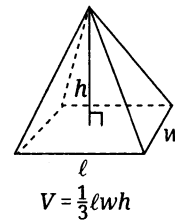
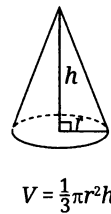
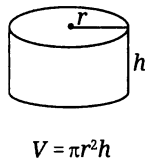
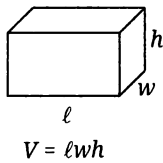
Unless otherwise indicated:

- All variables and expressions represent real numbers.
- Figures provided are drawn to scale.
- All figures lie in a plane.
- The domain of a given function  $f$  is the set of all real numbers  $x$  for which  $f(x)$  is a real number.

### REFERENCE



**Special Right Triangles**



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

**For multiple-choice questions**, solve each problem, choose the correct answer from the choices provided, and then fill in the circle with the answer letter. Enter only one answer for each question. You will not get credit for questions with more than one answer entered, or for questions with no answers entered.

**For student-produced response questions**, solve each problem and write your answer in the test book as described below.

- Enter your answer into the box provided.
- If you find **more than one correct answer**, enter only one answer.
- Your answer can be up to 5 characters for a **positive** answer and up to 6 characters (including the negative sign) for a **negative** answer.
- If your answer is a **fraction** that is too long (over 5 characters for positive, 6 characters for negative), write the decimal equivalent.
- If your answer is a **decimal** that is too long (over 5 characters for positive, 6 characters for negative), truncate it or round at the fourth digit.
- If your answer is a **mixed number** (such as  $3\frac{1}{2}$ ), write it as an improper fraction ( $\frac{7}{2}$ ) or its decimal equivalent (3.5).
- Don't enter **symbols** such as a percent sign, comma, or dollar sign in your answer.

**CONTINUE** 

## Section 2, Module 2—Harder: Math

### 1 Mark for Review

How many solutions does the equation  $2z + 8 = 2z - 4$  have?

(A) Exactly one

(B) Exactly two

(C) Infinitely many

(D) Zero

### 2 Mark for Review

$$a + 5b = 30$$

$$-5b = 40$$

What is the value of  $a$  if  $(a, b)$  is the solution to the given system of equations?

(A) 5

(B) 10

(C) 70

(D) 170

### 3 Mark for Review

Which of the following is equivalent to the expression  $-8y^4 + 12y^4$ ?

(A)  $4y^4$

(B)  $20y^4$

(C)  $4y^8$

(D)  $20y^8$

### 4 Mark for Review

Sophia was laying down mulch to fill garden beds of equal area. The amount of mulch, in cubic feet, Sophia had remaining after filling  $x$  garden beds can be estimated using the function  $f(x) = -75x + 500$ . In this context, which of the following statements is the best interpretation of the slope of the graph of  $y = f(x)$  in the  $xy$ -plane?

(A) Sophia had approximately 500 cubic feet of mulch when she started filling the garden beds.

(B) Sophia used approximately 75 cubic feet of mulch for each garden bed.

(C) Sophia had approximately 75 cubic feet of mulch when she started filling the garden beds.

(D) Sophia used approximately 500 cubic feet of mulch for each garden bed.

### 5 Mark for Review

An analysis of ticket sales for an opera showed that 6 times as many people attended the performance at night as attended the performance during the day. The analysis also showed that 2,500 more people attended the performance at night than attended the performance during the day. Based on the analysis, how many people attended the performance of the opera during the day if each person only attended one performance?

(A) 500

(B) 2,500

(C) 3,000

(D) 4,000

**CONTINUE** 

6  Mark for Review

$$y \geq x - 9$$

$$y \leq -3x - 5$$

In the  $xy$ -plane, which ordered pair  $(x, y)$  is a solution to the given system of inequalities?

Ⓐ  $(-2, -4)$ Ⓑ  $(-2, 4)$ Ⓒ  $(2, -4)$ Ⓓ  $(2, 4)$ 7  Mark for Review

A right triangle has a hypotenuse with a length of 14 inches and a leg with a length of 8 inches. What is the value of integer  $a$  if the other leg of the triangle has a length of  $2\sqrt{a}$  inches?

8  Mark for Review

What is the measure of an angle, in degrees, if it measures  $\frac{9\pi}{10}$  radians?

9  Mark for Review

Triangles  $ABC$  and  $DEF$  are similar to each other, and  $A$ ,  $B$ , and  $C$  correspond to  $D$ ,  $E$ , and  $F$ , respectively. Angle  $A$  is a right angle, angle  $E$  measures  $35^\circ$ , and the length of  $\overline{AB}$  is 15. What is the measure of angle  $B$ ?

Ⓐ  $15^\circ$ Ⓑ  $35^\circ$ Ⓒ  $55^\circ$ Ⓓ  $90^\circ$ 

**CONTINUE**

## Section 2, Module 2—Harder: Math

10  Mark for Review

Value	Frequency in data set O	Frequency in data set P
15	11	1
18	9	3
21	7	7
24	3	9
27	1	11

Two data sets, O and P, are shown in the table. Each data set consists of 31 values, and the table shows the frequencies of the values for each data set. Which of the following best relates the medians of data set O and data set P?

- (A) There is not enough information to compare the medians of data set O and data set P.
- (B) The median of data set O is greater than the median of data set P.
- (C) The median of data set O is less than the median of data set P.
- (D) The median of data set O is equal to the median of data set P.

11  Mark for Review

What is the product of the solutions to the equation  $-4a(a - 3) = a(2a - 11) - 18$ ?

12  Mark for Review

Zoe bought 46 jerseys for a youth soccer league. She packed the jerseys in  $a$  large boxes and  $b$  small boxes to store until the next season. This situation can be represented by the equation  $7a + 6b = 46$ . In this context, which of the following statements best describes the meaning of the number 7?

- (A) The total number of jerseys packed in large boxes
- (B) The total number of jerseys packed in small boxes
- (C) The number of jerseys packed in each small box
- (D) The number of jerseys packed in each large box

13  Mark for Review

A line is graphed in the  $xy$ -plane that contains the points  $(c, -14)$  and  $(c + 9, -41)$ , where  $c$  is a constant. If the  $y$ -intercept of the line is  $(c + 2, k)$ , what is the value of the constant  $k$ ?

**CONTINUE** 

14  Mark for Review

Max throws a Frisbee to his dog. When  $0 \leq x \leq 10$ , the Frisbee's height above the ground  $g(x)$ , in feet,  $x$  seconds after Max threw it, can be represented by the function  $g(x) = -\frac{1}{2}(x - 4.9)^2 + 12$ . In the  $xy$ -plane, which of the following statements is the best interpretation of the vertex of the graph of  $g(x)$ ?

- (A) The Frisbee was at a height of 4.9 feet above the ground when it was thrown.
- (B) The Frisbee was at a height of 12 feet above the ground when it was thrown.
- (C) The Frisbee was at a maximum height of 12 feet above the ground.
- (D) The Frisbee was at a maximum height of 4.9 feet above the ground.

15  Mark for Review

The profit, in dollars, for selling a certain item can be represented by the function  $P(x) = 50(x - 2.25) + 20$ , where  $x$  is the number of items sold and  $x \geq 3$ . By what amount will the profit decrease if 3 fewer items are sold?

- (A) \$37.50
- (B) \$57.50
- (C) \$130.00
- (D) \$150.00

16  Mark for Review

$$6x - 11y = 242$$

What is the  $y$ -intercept of the line when the given equation is graphed in the  $xy$ -plane?

- (A)  $(0, -22)$
- (B)  $(0, -11)$
- (C)  $(0, 11)$
- (D)  $(0, 22)$

17  Mark for Review

A typical business suit requires 31.6 square feet of fabric. What is the area, in square inches, of this amount of fabric? (1 foot = 12 inches)

- (A) 5.62
- (B) 67.46
- (C) 379.2
- (D) 4,550.4


18  Mark for Review

$$3x^3 - 57x^2 + 252x$$

Two of the factors of the given expression are  $(x + p)$  and  $(x + q)$ , where  $p$  and  $q$  are constants and  $p < q$ . What is the value of  $q$ ?


**CONTINUE**

## Section 2, Module 2—Harder: Math

19  Mark for Review

$$\begin{aligned} 27x &= 39y + \frac{1}{4} \\ 78y - 34x &= 20x - b \end{aligned}$$

When the given system of linear equations is graphed in the  $xy$ -plane, there are an infinite number of solutions. What is the value of the constant  $b$ ?

20  Mark for Review

There are  $b$  backpackers on a trip, and one pallet of meals will provide the group with 57 meals. If each backpacker will eat 3 meals, which of the following represents the total number of pallets of meals,  $p$ , needed for the trip?

(A)  $p = \frac{b}{57}$

(B)  $p = \frac{b}{19}$

(C)  $p = 57b$

(D)  $p = 171b$

21  Mark for Review

In the function  $f(x) = ax^2 - 6x + c$ ,  $a$  and  $c$  are constants. When graphed in the  $xy$ -plane, function  $f$  has a minimum value at  $(h, k)$  and a positive  $y$ -intercept. If  $f(2) = f(18)$ , which of the following must be true?

- I.  $0 < a < 1$   
 II.  $c > 0$

(A) I only

(B) II only

(C) I and II

(D) Neither I nor II

22  Mark for Review

Which of the following represents a solution to the equation  $\frac{k^2}{\sqrt{x^2 + k^2}} = 12 - \frac{x^2}{\sqrt{x^2 + k^2}}$ , where  $x$  is a variable and  $k$  is a constant greater than 0?

(A)  $-k$

(B)  $\sqrt{12^2 - k^2}$

(C)  $\sqrt{k^2 + 12^2}$

(D)  $12^2 - k^2$

# STOP

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





**PRACTICE TEST 1: MULTIPLE-CHOICE ANSWER KEY**

Reading and Writing		
Module 1	Module 2 (Easier)	Module 2 (Harder)
1. D	1. A	1. A
2. B	2. D	2. D
3. C	3. B	3. B
4. D	4. C	4. C
5. B	5. C	5. A
6. C	6. D	6. D
7. D	7. B	7. B
8. C	8. A	8. D
9. C	9. D	9. D
10. A	10. D	10. C
11. A	11. B	11. D
12. A	12. C	12. D
13. D	13. A	13. D
14. D	14. C	14. D
15. A	15. B	15. C
16. B	16. B	16. D
17. A	17. B	17. A
18. C	18. C	18. C
19. D	19. D	19. A
20. B	20. B	20. D
21. D	21. A	21. B
22. A	22. D	22. C
23. C	23. C	23. A
24. B	24. D	24. A
25. B	25. B	25. A
26. B	26. B	26. B
27. B	27. A	27. D

Math		
Module 1	Module 2 (Easier)	Module 2 (Harder)
1. A	1. A	1. D
2. 10	2. C	2. C
3. D	3. D	3. A
4. A	4. 162	4. B
5. 87	5. B	5. A
6. B	6. A	6. A
7. D	7. 5	7. 33
8. C	8. -7	8. 162
9. D	9. A	9. B
10. 3072	10. 14 or 46	10. C
11. B	11. C	11. -3
12. A	12. B	12. D
13. 12	13. D	13. -20
14. A	14. B	14. C
15. $-\frac{1}{3}$	15. C	15. D
16. 85	16. D	16. A
17. C	17. B	17. D
18. A	18. 196	18. -7
19. C	19. B	19. $\frac{1}{2}$ or 0.5
20. D	20. A	20. B
21. B	21. A	21. C
22. C	22. D	22. B