

# SAT2-MATHEMATICS<sup>Q&As</sup>

SAT Section 2: Mathematics

## Pass Test Prep SAT2-MATHEMATICS Exam with 100% Guarantee

Free Download Real Questions & Answers **PDF** and **VCE** file from:

<https://www.leads4pass.com/sat2-mathematics.html>

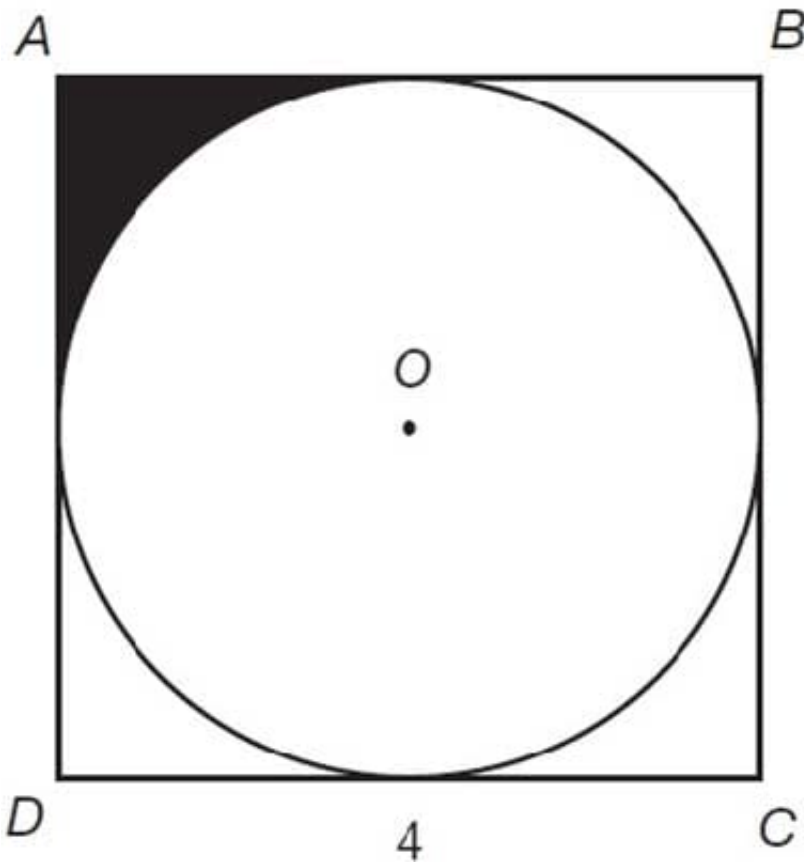
100% Passing Guarantee  
100% Money Back Assurance

Following Questions and Answers are all new published by Test Prep  
Official Exam Center

-  **Instant Download** After Purchase
-  **100% Money Back** Guarantee
-  **365 Days** Free Update
-  **800,000+** Satisfied Customers



## QUESTION 1



In the diagram above, the length of a side of square ABCD is four units. What is the area of the shaded region?

- A. 4
- B.  $4 - \pi$
- C.  $4 - 4\pi$
- D.  $16\pi$
- E.  $16 - 4\pi$

Correct Answer: B

Explanation:

The area of a square is equal to  $s^2$ , where  $s$  is the length of a side of the square. The area of ABCD is  $4^2 = 16$  square units. The area of a circle is equal to  $\pi r^2$ , where  $r$  is the radius of the circle.

The diameter of the circle is four units. The radius of the circle is  $4/2 = 2$  square units. The area of the circle is equal to  $\pi(2)^2 = 4\pi$ . The shaded area is equal to one-fourth of the difference between the area of the square and the area of the circle:  $1/4(16 - 4\pi) = 4 - \pi$ .

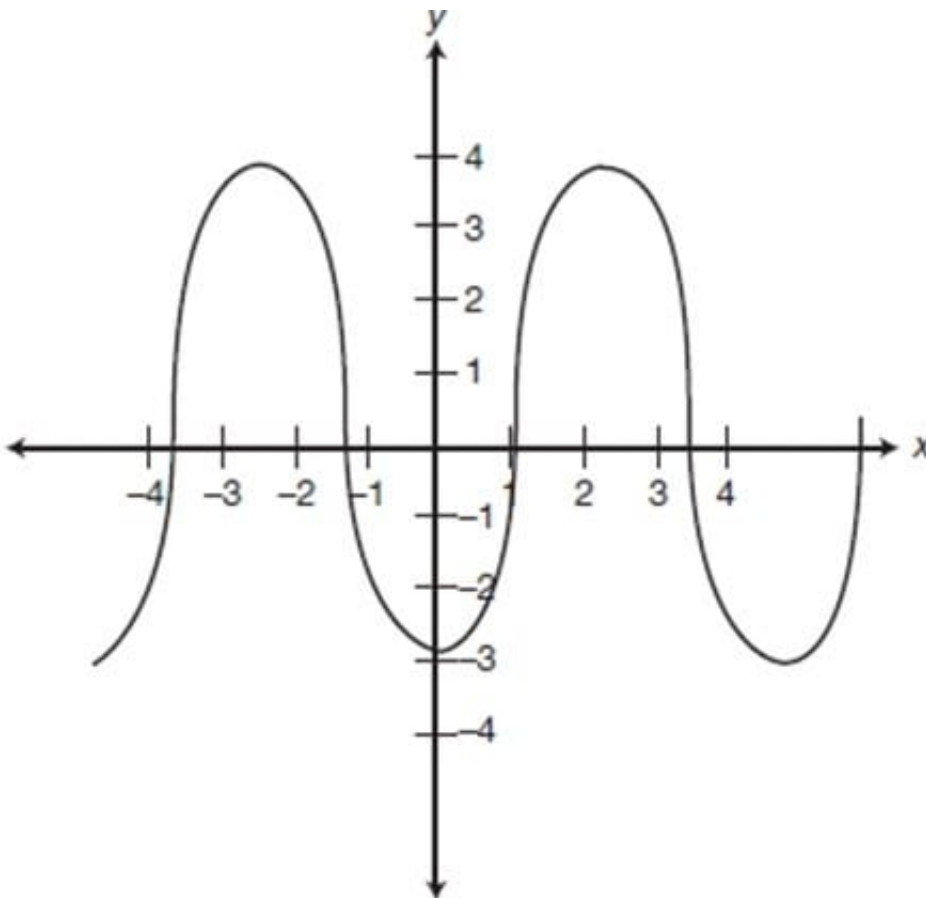
**QUESTION 2**

What is the next number in the series below? 3 16 6 12 12 8

- A. 4
- B. 15
- C. 20
- D. 24
- E. 32

Correct Answer: D

This series actually has two alternating sets of numbers. The first number is doubled, giving the third number. The second number has 4 subtracted from it, giving it the fourth number. Therefore, the blank space will be 12 doubled, or 24.

**QUESTION 3**

The graph of  $f(x)$  is shown above. How many values can be found for  $f(3)$ ?

- A. 0
- B. 1
- C. 2
- D. 4
- E. cannot be determined

Correct Answer: B

Explanation:

Be careful — the question asks you for the number of values off (3) not  $f(x)=3$ . In other words, how many y values can be generated when  $x=3$ ? If the line  $x=3$  is drawn on the graph, it passes through only one point. There is only one value for  $f(x)$

#### QUESTION 4

The value of  $d$  is increased 50%, then decreased 50%. Compared to its original value, the value of  $d$  is now

- A. 25% smaller
- B. 25% larger
- C. 50% smaller
- D. 50% larger
- E. the same

Correct Answer: A

To increased by 50%, multiply  $d$  by 1.5:  $d= 1.5d$ . To find 50% of  $1.5d$ , multiply  $1.5d$  by 0.5:  $(1.5d)(0.5) = 0.75d$ . Compared to its original value,  $d$  is now 75% of what it was. The value of  $d$  is now 25% smaller.

#### QUESTION 5

The length of a rectangle is one greater than three times its width. If the perimeter of the rectangle is 26 feet, what is the area of the rectangle?

- A. 13 ft<sup>2</sup>
- B. 24 ft<sup>2</sup>
- C. 30 ft<sup>2</sup>
- D. 78 ft<sup>2</sup>
- E. 100 ft<sup>2</sup>

Correct Answer: C

The perimeter of a rectangle is equal to  $2l+2w$ , where  $l$  is the length of the rectangle and  $w$  is the width of the rectangle. If the length is one greater than three times the width, then set the width equal to  $x$  and set the length equal to  $3x+1$ :

$$2(3x + 1) + 2(x) = 26$$

$$6x + 2 + 2x = 26$$

$$8x = 24$$

$$x = 3$$

The width of the rectangle is 3 ft and the length of the rectangle is 10 ft. The area of a rectangle is equal to  $lw$ ;  $(10 \text{ ft})(3 \text{ ft}) = 30 \text{ ft}^2$ .

[SAT2-MATHEMATICS VCE Dumps](#)

[SAT2-MATHEMATICS Study Guide](#)

[SAT2-MATHEMATICS Exam Questions](#)