



SAT2-MATHEMATICS^{Q&As}

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.pass4itsure.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****SIMULATION**

If the distance from point $(-2, m)$ to point $(4, -1)$ is 10 units, what is the positive value of m ?

A. 7

Correct Answer: A

First, use the distance formula to form an equation that can be solved for m :

$$\text{Distance} = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

$$10 = \sqrt{(4 - (-2))^2 + ((-1) - m)^2}$$

$$10 = \sqrt{(6)^2 + (-1 - m)^2}$$

$$10 = \sqrt{36 + m^2 + 2m + 1}$$

$$10 = \sqrt{m^2 + 2m + 37}$$

$$100 = m^2 + 2m + 37$$

$$m^2 + 2m - 63 = 0$$

Now, factor $m^2 + 2m - 63$:

$$(m + 9)(m - 7) = 0$$

$m = 7$, $m = -9$. The positive value of m is 7.

QUESTION 2

The equation A. -8 or 8 .

$$\frac{x^2}{4} - 3x = -8 \text{ When } x = ?$$

B. -4 or 4 .

C. -4 or -8 .



D. 4 or -8.

E. 4 or 8.

Correct Answer: E

Write the equation in quadratic form and find its roots:

$$\frac{x^2}{4} - 3x = -8$$

$$x^2 - 12x = -32$$

$$x^2 - 12x + 32 = 0$$

$$(x - 8)(x - 4) = 0$$

$$x - 8 = 0, \quad x = 4$$

$$\frac{x^2}{4} - 3x = -8 \text{ when } x \text{ is either 4 or 8.}$$

QUESTION 3

SIMULATION

$$(3xy + x) \frac{x}{y}$$

What is the value of when $x = 2$ and $y = 5$?

A. 4

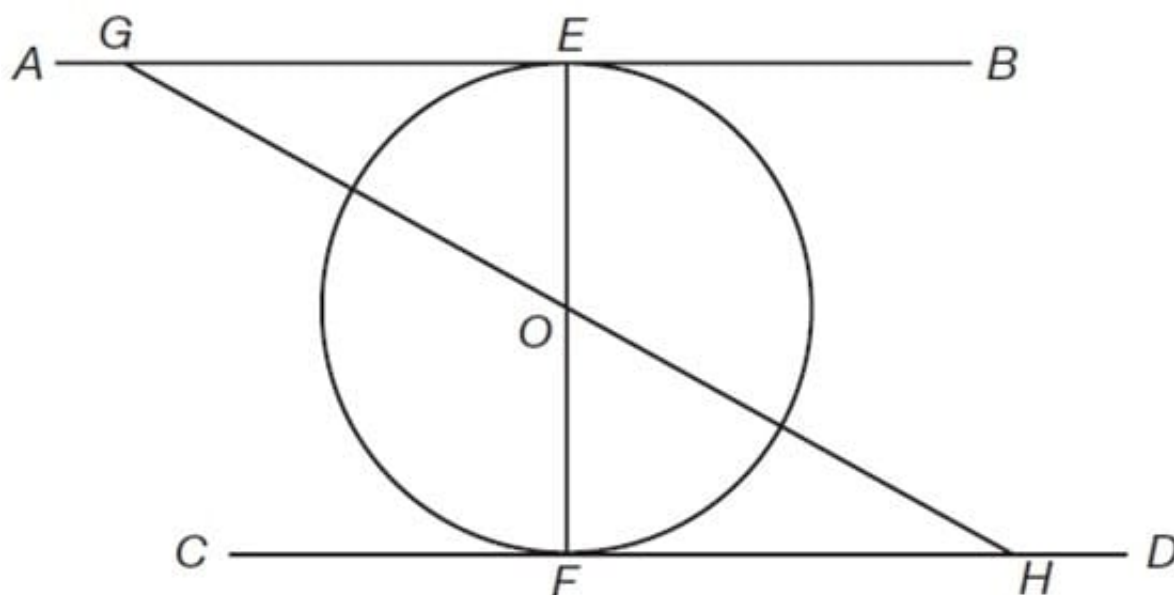
Correct Answer: A

Substitute 2 for x and 5 for

$$y: (3xy + x) \frac{x}{y} = ((3)(2)(5) + 2) \frac{2}{5} = (30 + 2) \frac{2}{5} = 32 \frac{2}{5} = (\sqrt[5]{32})^2 = 2^2 = 4. \text{ Or, } (3)(2)(5) = 30, 30 + 2 = 32,$$

the 5th root of 32 is 2, 2 raised to the 2nd power is 4.

QUESTION 4



In the diagram above, line AB is parallel to line CD, both lines are tangents to circle O and the diameter of circle O is equal in measure to the length of line OH. If the diameter of circle O is 24 in, what is the measure of angle BGH?

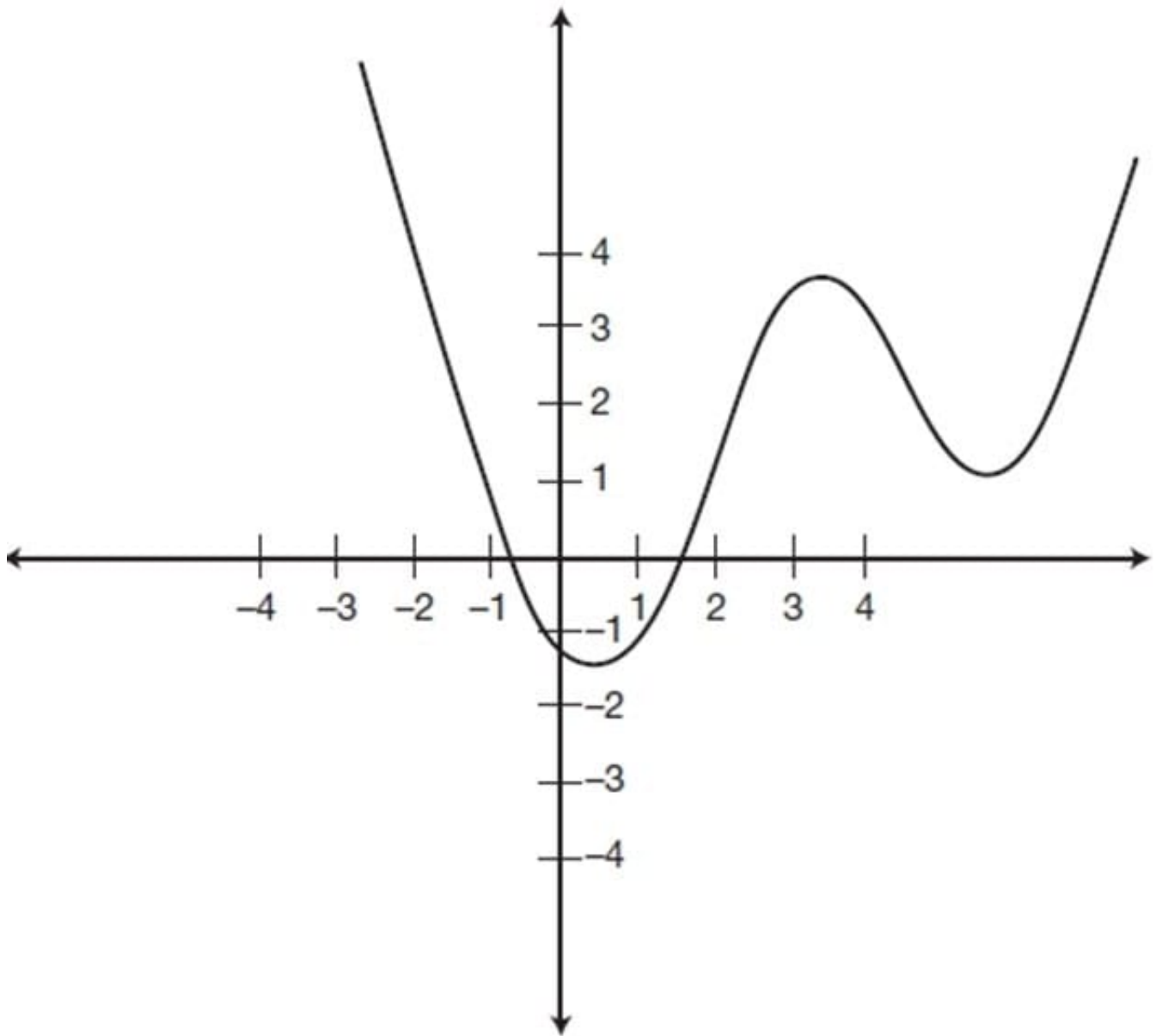
- A. 30 degrees
- B. 45 degrees
- C. 60 degrees
- D. 75 degrees
- E. cannot be determined

Correct Answer: A

Lines OF and OE are radii of circle O and since a tangent and a radius form a right angle, triangles OFH and OGE are right triangles. If the length of the diameter of the circle is 24 in, then the length of the radius is 12 in. The sine of angle OHF is equal to $12/24$, or $1/2$. The measure of an angle with a sine of $1/2$ is 30 degrees. Therefore, angle OHF measures 30 degrees. Since angles BGH and OHF are alternating angles,

they are equal in measure. Therefore, angle BGH also measures 30 degrees.

QUESTION 5



In the diagram above of $f(x)$, for how many values does $f(x) = -1$?

- A. 0
- B. 1
- C. 2
- D. 3
- E. 4

Correct Answer: C

The function $f(x)$ is equal to -1 every time the graph of $f(x)$ crosses the line $y = -1$. The graph of $f(x)$ crosses $y = -1$ twice; therefore, there are two values for which $f(x) = -1$.



VCE & PDF

Pass4itSure.com

<https://www.pass4itsure.com/sat2-mathematics.html>

2024 Latest pass4itsure SAT2-MATHEMATICS PDF and VCE dumps

Download

[SAT2-MATHEMATICS PDF
Dumps](#)

[SAT2-MATHEMATICS
Practice Test](#)

[SAT2-MATHEMATICS
Study Guide](#)