Question ID 90990b9a

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear equations in one variable and systems of equations in two variables	Easy

ID: 90990b9a

$$x = 49$$
$$y = \sqrt{x} + 9$$

The graphs of the given equations intersect at the point (x, y) in the xy-plane. What is the value of y?

A. 16

B. 40

C. 81

D. 130

ID: 90990b9a Answer

Correct Answer: A

Rationale

Choice A is correct. It's given that the graphs of the given equations intersect at the point (x, y) in the xy-plane. It follows that (x, y) represents a solution to the system consisting of the given equations. The first equation given is $x = 49$. Substituting 49 for x in the second equation given, $y = \sqrt{x} + 9$, yields $y = \sqrt{49} + 9$, which is equivalent to $y = 7 + 9$, or $y = 16$. It follows that the graphs of the given equations intersect at the point $(49, 16)$. Therefore, the value of y is 16.

Choice B is incorrect and may result from conceptual or calculation errors.

Choice C is incorrect and may result from conceptual or calculation errors.

Choice D is incorrect and may result from conceptual or calculation errors.

Question Difficulty: Easy

Question ID 097bd3c9

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear equations in one variable and systems of equations in two variables	Easy

ID: 097bd3c9

$$y - 57 = px$$

The given equation relates the positive numbers p, x, and y. Which equation correctly expresses y in terms of p and x?

A. $y = 57x + p$

B. $y = px + 57$

C. $y = 57px$

D. $y = \frac{px}{57}$

ID: 097bd3c9 Answer

Correct Answer: B

Rationale

Choice B is correct. Adding 57 to each side of the given equation yields $y = px + 57$. Therefore, the equation $y = px + 57$ correctly expresses y in terms of p and x.

Choice A is incorrect and may result from conceptual errors.

Choice C is incorrect and may result from conceptual errors.

Choice D is incorrect and may result from conceptual errors.

Question Difficulty: Easy

Question ID 07e83fd6

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear equations in one variable and systems of equations in two variables	Easy

$$b = 42cf$$

The given equation relates the positive numbers b, c, and f. Which equation correctly expresses c in terms of b and f?

A. $c = \frac{b}{42f}$

B. $c = \frac{b-42}{f}$

C. $c = 42bf$

D. $c = 42 - b - f$

Correct Answer: A

Rationale

Choice A is correct. It's given that the equation $b = 42cf$ relates the positive numbers b, c, and f. Dividing each side of the given equation by $42f$ yields $\frac{b}{42f} = c$, or $c = \frac{b}{42f}$. Thus, the equation $c = \frac{b}{42f}$ correctly expresses c in terms of b and f.

Choice B is incorrect. This equation can be rewritten as $b = cf + 42$.

Choice C is incorrect. This equation can be rewritten as $b = \frac{c}{42f}$.
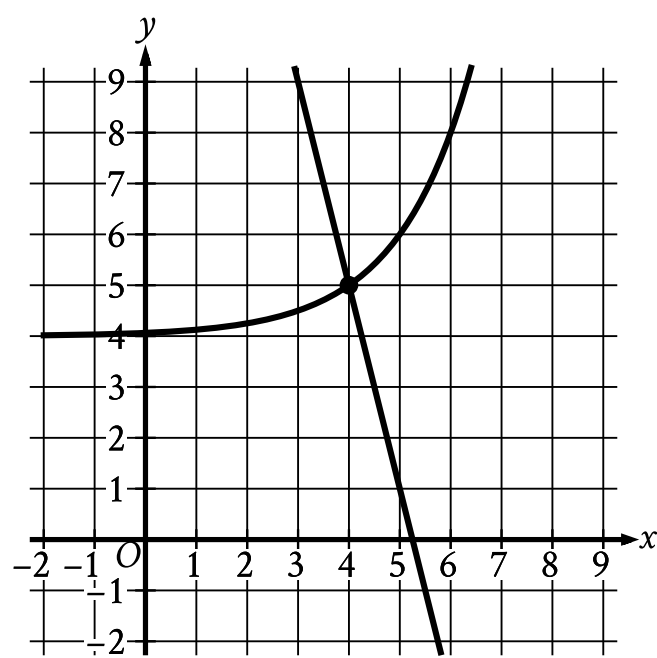
Choice D is incorrect. This equation can be rewritten as $b = 42 - c - f$.

Question Difficulty: Easy

Question ID e11a5b89

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear equations in one variable and systems of equations in two variables	Easy

The graph of a system of a linear equation and a nonlinear equation is shown. What is the solution (x, y) to this system?

A. $(0, 0)$

B. $(0, 4)$

C. $(4, 5)$

D. $(5, 0)$

Correct Answer: C

Rationale

Choice C is correct. The solution to the system of two equations corresponds to the point where the graphs of the equations intersect. The graphs of the linear equation and the nonlinear equation shown intersect at the point $(4, 5)$. Thus, the solution to the system is $(4, 5)$.

Choice A is incorrect and may result from conceptual or calculation errors.

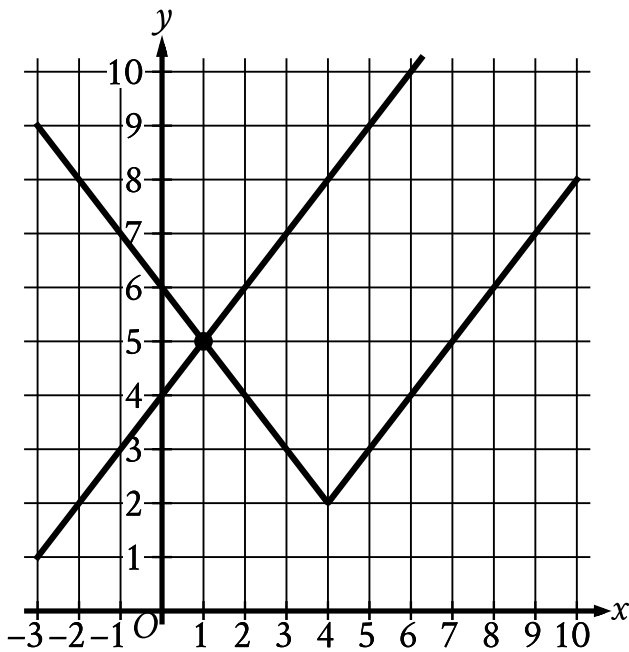Choice B is incorrect and may result from conceptual or calculation errors.

Choice D is incorrect and may result from conceptual or calculation errors.

Question Difficulty: Easy

Question ID 6b969570

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear equations in one variable and systems of equations in two variables	Easy

The graph of a system of an absolute value function and a linear function is shown. What is the solution (x, y) to this system of two equations?

A. $(-1, 5)$

B. $(0, 4)$

C. $(1, 5)$

D. $(4, 2)$

Correct Answer: C

Rationale

Choice C is correct. The solution to the system of two equations corresponds to the point where the graphs of the equations intersect. The graphs of the linear function and the absolute value function shown intersect at the point $(1, 5)$. Thus, the solution to the system is $(1, 5)$.

Choice A is incorrect and may result from conceptual or calculation errors.

Choice B is incorrect. This is the *y*-intercept of the graph of the linear function.

Choice D is incorrect. This is the vertex of the graph of the absolute value function.

Question Difficulty: Easy

Question ID 12511afa

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear equations in one variable and systems of equations in two variables	Easy

ID: 12511afa

$$|x - 5| = 10$$

What is one possible solution to the given equation?

ID: 12511afa Answer

Correct Answer: 15, -5

Rationale

The correct answer is 15 or -5. By the definition of absolute value, if $|x - 5| = 10$, then $x - 5 = 10$ or $x - 5 = -10$. Adding 5 to both sides of the first equation yields $x = 15$. Adding 5 to both sides of the second equation yields $x = -5$. Thus, the given equation has two possible solutions, 15 and -5. Note that 15 and -5 are examples of ways to enter a correct answer.

Question Difficulty: Easy

Question ID d824ccc7

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear equations in one variable and systems of equations in two variables	Easy

$$k^2 - 53 = 91$$

What is the positive solution to the given equation?

A. 144

B. 72

C. 38

D. 12

Correct Answer: D

Rationale

Choice D is correct. Adding 53 to each side of the given equation yields $k^2 = 144$. Taking the square root of each side of this equation yields $k = \pm 12$. Therefore, the positive solution to the given equation is 12.

Choice A is incorrect. This is the positive solution to the equation $k^2 - 53 = 20,683$, not $k^2 - 53 = 91$.

Choice B is incorrect. This is the positive solution to the equation $k^2 - 53 = 5,131$, not $k^2 - 53 = 91$.

Choice C is incorrect. This is the positive solution to the equation $k^2 - 53 = 1,391$, not $k^2 - 53 = 91$.

Question Difficulty: Easy

Question ID c3f59ee7

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear equations in one variable and systems of equations in two variables	Easy

$$c - 7 = 25p + k$$

The given equation relates the positive numbers c, p, and k. Which equation correctly expresses c in terms of p and k?

A. $c = 25p + k + 7$

B. $c = 25p + k - 7$

C. $c = 7(25p + k)$

D. $c = \frac{25p + k}{7}$

Correct Answer: A

Rationale

Choice A is correct. Adding 7 to each side of the given equation yields $c = 25p + k + 7$.

Choice B is incorrect. This equation is equivalent to $c + 7 = 25p + k$, not $c - 7 = 25p + k$.

Choice C is incorrect. This equation is equivalent to $\frac{c}{7} = 25p + k$, not $c - 7 = 25p + k$.
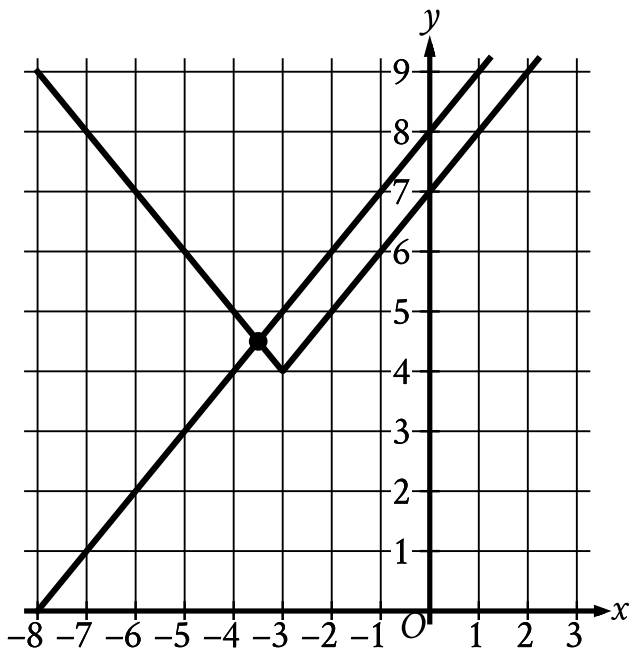
Choice D is incorrect. This equation is equivalent to $7c = 25p + k$, not $c - 7 = 25p + k$.

Question Difficulty: Easy

Question ID 962dce31

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear equations in one variable and systems of equations in two variables	Easy

The graph of a system of an absolute value function and a linear function is shown. What is the solution (x, y) to this system of two equations?

A. $(0, 8)$

B. $\left(\frac{7}{2}, \frac{9}{2}\right)$

C. $\left(-\frac{7}{2}, \frac{9}{2}\right)$

D. $(-3, 4)$

Correct Answer: C

Rationale

Choice C is correct. The solution to a system of two equations corresponds to the point where the graphs of the equations intersect. The graphs of the linear function and the absolute value function shown intersect at a point with an *x*-coordinate

between -4 and -3 and a *y*-coordinate between 4 and 5. Of the given choices, only $\left(-\frac{7}{2}, \frac{9}{2}\right)$ has an *x*-coordinate between -4 and -3 and a *y*-coordinate between 4 and 5.

Choice A is incorrect. This is the *y*-intercept of the graph of the linear function.

Choice B is incorrect and may result from conceptual or calculation errors.

Choice D is incorrect. This is the vertex of the graph of the absolute value function.

Question Difficulty: Easy

Question ID 13f26a62

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear equations in one variable and systems of equations in two variables	Easy

ID: 13f26a62

$$\frac{x^2}{25} = 36$$

What is a solution to the given equation?

A. 6

B. 30

C. 450

D. 900

ID: 13f26a62 Answer

Correct Answer: B

Rationale

Choice B is correct. Multiplying the left- and right-hand sides of the given equation by 25 yields $x^2 = 900$. Taking the square root of the left- and right-hand sides of this equation yields $x = 30$ or $x = -30$. Of these two solutions, only 30 is given as a choice.

Choice A is incorrect. This is a solution to the equation $x^2 = 36$.

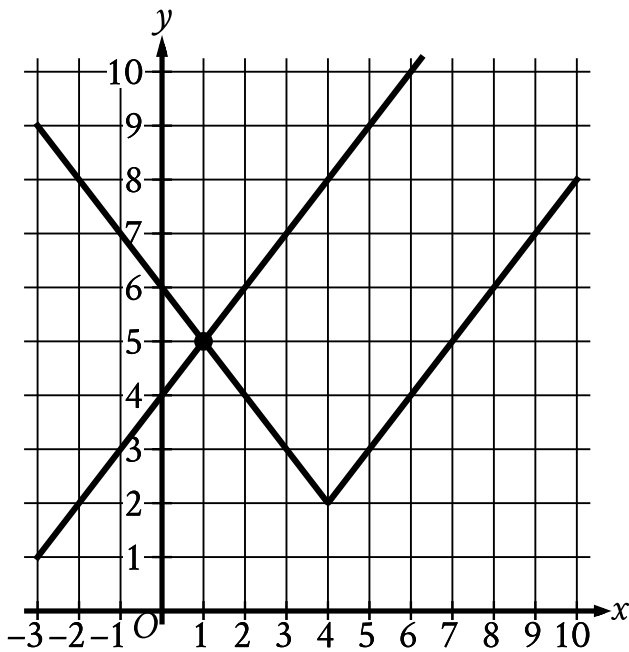Choice C is incorrect and may result from conceptual or calculation errors.

Choice D is incorrect and may result from conceptual or calculation errors.

Question Difficulty: Easy

Question ID 6b969570

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear equations in one variable and systems of equations in two variables	Easy

The graph of a system of an absolute value function and a linear function is shown. What is the solution (x, y) to this system of two equations?

A. $(-1, 5)$

B. $(0, 4)$

C. $(1, 5)$

D. $(4, 2)$

Correct Answer: C

Rationale

Choice C is correct. The solution to the system of two equations corresponds to the point where the graphs of the equations intersect. The graphs of the linear function and the absolute value function shown intersect at the point $(1, 5)$. Thus, the solution to the system is $(1, 5)$.

Choice A is incorrect and may result from conceptual or calculation errors.

Choice B is incorrect. This is the *y*-intercept of the graph of the linear function.

Choice D is incorrect. This is the vertex of the graph of the absolute value function.

Question Difficulty: Easy

Question ID 7d20509f

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear equations in one variable and systems of equations in two variables	Easy

ID: 7d20509f

$$y = 76$$
$$y = x^2 - 5$$

The graphs of the given equations in the *xy*-plane intersect at the point (x, y). What is a possible value of x?

A. $-\frac{76}{5}$

B. -9

C. 5

D. 76

ID: 7d20509f Answer

Correct Answer: B

Rationale

Choice B is correct. Since the point (x, y) is an intersection point of the graphs of the given equations in the *xy*-plane, the pair (x, y) should satisfy both equations, and thus is a solution of the given system. According to the first equation, $y = 76$. Substituting 76 in place of y in the second equation yields $x^2 - 5 = 76$. Adding 5 to both sides of this equation yields $x^2 = 81$. Taking the square root of both sides of this equation yields two solutions: $x = 9$ and $x = -9$. Of these two solutions, only -9 is given as a choice.

Choice A is incorrect and may result from conceptual or calculation errors.

Choice C is incorrect and may result from conceptual or calculation errors.

Choice D is incorrect. This is the value of coordinate y, rather than x, of the intersection point (x, y).

Question Difficulty: Easy

Question ID 66966d5b

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear equations in one variable and systems of equations in two variables	Easy

ID: 66966d5b

$$p + 34 = q + r$$

The given equation relates the variables p, q, and r. Which equation correctly expresses p in terms of q and r?

A. $p = q + r + 34$

B. $p = q + r - 34$

C. $p = -q - r + 34$

D. $p = -q - r - 34$

ID: 66966d5b Answer

Correct Answer: B

Rationale

Choice B is correct. Subtracting 34 from each side of the given equation yields $p = q + r - 34$. Thus, the equation $p = q + r - 34$ correctly expresses p in terms of q and r.

Choice A is incorrect. This equation can be rewritten as $p - 34 = q + r$.

Choice C is incorrect. This equation can be rewritten as $p - 34 = -q - r$.

Choice D is incorrect. This equation can be rewritten as $p + 34 = -q - r$.

Question Difficulty: Easy

Question ID eae912fb

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear equations in one variable and systems of equations in two variables	Easy

$$x + 7 = 10$$
$$(x + 7)^2 = y$$

Which ordered pair (x, y) is a solution to the given system of equations?

A. $(3, 100)$

B. $(3, 3)$

C. $(3, 10)$

D. $(3, 70)$

Correct Answer: A

Rationale

Choice A is correct. The solution to a system of equations is the ordered pair (x, y) that satisfies all equations in the system. It's given by the first equation in the system that $x + 7 = 10$. Substituting 10 for $x + 7$ into the second equation yields $10^2 = y$, or $y = 100$. The x-coordinate of the solution to the system of equations can be found by subtracting 7 from both sides of the equation $x + 7 = 10$, which yields $x = 3$. Therefore, the ordered pair $(3, 100)$ is a solution to the given system of equations.

Choice B is incorrect and may result from conceptual or calculation errors.

Choice C is incorrect and may result from conceptual or calculation errors.

Choice D is incorrect and may result from conceptual or calculation errors.

Question Difficulty: Easy

Question ID f392eb64

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear equations in one variable and systems of equations in two variables	Easy

$$|x - 2| = 9$$

What is one possible solution to the given equation?

Correct Answer: 11, -7

Rationale

The correct answer is 11 or -7. By the definition of absolute value, if $|x - 2| = 9$, then $x - 2 = 9$ or $x - 2 = -9$. Adding 2 to both sides of the equation $x - 2 = 9$ yields $x = 11$. Adding 2 to both sides of the equation $x - 2 = -9$ yields $x = -7$. Thus, the given equation, $|x - 2| = 9$, has two possible solutions, 11 and -7. Note that 11 and -7 are examples of ways to enter a correct answer.

Question Difficulty: Easy

Question ID 5a018bb6

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear equations in one variable and systems of equations in two variables	Easy

$$8j = k + 15m$$

The given equation relates the distinct positive numbers j, k, and m. Which equation correctly expresses j in terms of k and m?

A. $j = \frac{k}{8} + 15m$

B. $j = k + \frac{15m}{8}$

C. $j = 8(k + 15m)$

D. $j = \frac{k+15m}{8}$

Correct Answer: D

Rationale

Choice D is correct. To express j in terms of k and m, the given equation must be solved for j. Dividing each side of the given equation by 8 yields $j = \frac{k+15m}{8}$.

Choice A is incorrect. This is equivalent to $8j = k + 120m$.

Choice B is incorrect. This is equivalent to $8j = 8k + 15m$.

Choice C is incorrect. This is equivalent to $\frac{j}{8} = k + 15m$.

Question Difficulty: Easy

Question ID 44f0984a

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear equations in one variable and systems of equations in two variables	Easy

ID: 44f0984a

$$|x + 45| = 48$$

What is the positive solution to the given equation?

A. 3

B. 48

C. 93

D. 96

ID: 44f0984a Answer

Correct Answer: A

Rationale

Choice A is correct. The given absolute value equation can be rewritten as two linear equations: $x + 45 = 48$ and $-(x + 45) = 48$, or $x + 45 = -48$. Subtracting 45 from both sides of the equation $x + 45 = 48$ yields $x = 3$. Subtracting 45 from both sides of the equation $x + 45 = -48$ yields $x = -93$. Thus, the given equation has two possible solutions, 3 and -93. Therefore, the positive solution to the given equation is 3.

Choice B is incorrect and may result from conceptual or calculation errors.

Choice C is incorrect and may result from conceptual or calculation errors.

Choice D is incorrect and may result from conceptual or calculation errors.

Question Difficulty: Easy

Question ID 3b1af658

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear equations in one variable and systems of equations in two variables	Easy

$$x = 8$$
$$y = x^2 + 8$$

The graphs of the equations in the given system of equations intersect at the point (x, y) in the *xy*-plane. What is the value of y?

A. 8

B. 24

C. 64

D. 72

Correct Answer: D

Rationale

Choice D is correct. Since the graphs of the equations in the given system intersect at the point (x, y), the point (x, y) represents a solution to the given system of equations. The first equation of the given system of equations states that $x = 8$. Substituting 8 for x in the second equation of the given system of equations yields $y = 8^2 + 8$, or $y = 72$. Therefore, the value of y is 72.

Choice A is incorrect. This is the value of x, not y.

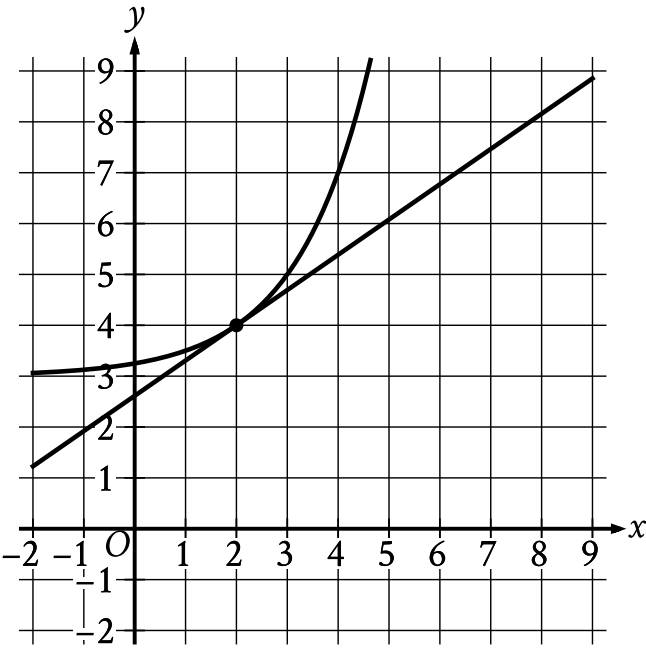Choice B is incorrect and may result from conceptual or calculation errors.

Choice C is incorrect and may result from conceptual or calculation errors.

Question Difficulty: Easy

Question ID 9c7ef949

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear equations in one variable and systems of equations in two variables	Easy

The graph of a system of a linear equation and a nonlinear equation is shown. What is the solution (x, y) to this system?

A. $(0, 0)$

B. $(0, 2)$

C. $(2, 4)$

D. $(4, 0)$

Correct Answer: C

Rationale

Choice C is correct. The solution to the system of two equations corresponds to the point where the graphs of the equations intersect. The graphs of the linear equation and the nonlinear equation shown intersect at the point $(2, 4)$. Thus, the solution to the system is $(2, 4)$.

Choice A is incorrect and may result from conceptual or calculation errors.

Choice B is incorrect and may result from conceptual or calculation errors.

Choice D is incorrect and may result from conceptual or calculation errors.

Question Difficulty: Easy

Question ID 02929ad6

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear equations in one variable and systems of equations in two variables	Easy

ID: 02929ad6

$$(x+2)(x-5)(x+9) = 0$$

What is a positive solution to the given equation?

A. 3

B. 4

C. 5

D. 18

ID: 02929ad6 Answer

Correct Answer: C

Rationale

Choice C is correct. Applying the zero product property to the given equation yields three equations: $x + 2 = 0$, $x - 5 = 0$, and $x + 9 = 0$. Subtracting 2 from both sides of the equation $x + 2 = 0$ yields $x = -2$. Adding 5 to both sides of the equation $x - 5 = 0$ yields $x = 5$. Subtracting 9 from both sides of the equation $x + 9 = 0$ yields $x = -9$. Therefore, the solutions to the given equation are -2, 5, and -9. It follows that a positive solution to the given equation is 5.

Choice A is incorrect and may result from conceptual or calculation errors.

Choice B is incorrect and may result from conceptual or calculation errors.

Choice D is incorrect and may result from conceptual or calculation errors.

Question Difficulty: Easy

Question ID e798aedd

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear equations in one variable and systems of equations in two variables	Easy

ID: e798aedd

$$x^2 = (22)(22)$$

What is the positive solution to the given equation?

ID: e798aedd Answer

Correct Answer: 22

Rationale

The correct answer is 22. The given equation, $x^2 = (22)(22)$, is equivalent to $x^2 = (22)^2$. Taking the square root of each side of this equation yields $x = \pm 22$. Thus, the positive solution to the given equation is 22.

Question Difficulty: Easy

Question ID 376d4f16

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear equations in one variable and systems of equations in two variables	Easy

ID: 376d4f16

$$|p| + 61 = 65$$

Which value is a solution to the given equation?

A. $\frac{65}{61}$

B. 4

C. 126

D. 130

ID: 376d4f16 Answer

Correct Answer: B

Rationale

Choice B is correct. Subtracting 61 from each side of the given equation yields $|p| = 4$. By the definition of absolute value, if $|p| = 4$, then $p = 4$ or $p = -4$. Of the given choices, 4 is a solution to the given equation.

Choice A is incorrect. This is the quotient, not the difference, of 65 and 61.

Choice C is incorrect. This is the sum, not the difference, of 65 and 61.

Choice D is incorrect and may result from conceptual or calculation errors.

Question Difficulty: Easy

Question ID 2e4d4640

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear equations in one variable and systems of equations in two variables	Easy

ID: 2e4d4640

$$6r = 7s + t$$

The given equation relates the variables r, s, and t. Which equation correctly expresses s in terms of r and t?

A. $s = 42r - t$

B. $s = 7(6r - t)$

C. $s = \frac{6}{7}r - t$

D. $s = \frac{6r-t}{7}$

ID: 2e4d4640 Answer

Correct Answer: D

Rationale

Choice D is correct. Subtracting t from both sides of the given equation yields $6r - t = 7s$. Dividing both sides of this equation by 7 yields $\frac{6r-t}{7} = s$. Therefore, the equation $s = \frac{6r-t}{7}$ correctly expresses s in terms of r and t.

Choice A is incorrect and may result from conceptual or calculation errors.

Choice B is incorrect and may result from conceptual or calculation errors.

Choice C is incorrect and may result from conceptual or calculation errors.

Question Difficulty: Easy

Question ID e935f479

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear equations in one variable and systems of equations in two variables	Easy

$$7m = 2(n + p)$$

The given equation relates the positive numbers m, n, and p. Which equation correctly gives m in terms of n and p?

A. $m = \frac{2(n+p)}{7}$

B. $m = 2(n + p)$

C. $m = 2(n + p) - 7$

D. $m = 2 - n - p - 7$

Correct Answer: A

Rationale

Choice A is correct. Dividing each side of the given equation by 7 yields $m = \frac{2(n+p)}{7}$.

Choice B is incorrect and may result from conceptual or calculation errors.

Choice C is incorrect. This equation is equivalent to $7 + m = 2(n + p)$, not $7m = 2(n + p)$.

Choice D is incorrect and may result from conceptual or calculation errors.

Question Difficulty: Easy

Question ID 05af32fe

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear equations in one variable and systems of equations in two variables	Easy

ID: 05af32fe

$$q - 29r = s$$

The given equation relates the positive numbers q, r, and s. Which equation correctly expresses q in terms of r and s?

A. $q = s - 29r$

B. $q = s + 29r$

C. $q = 29rs$

D. $q = -\frac{s}{29r}$

ID: 05af32fe Answer

Correct Answer: B

Rationale

Choice B is correct. Adding $29r$ to each side of the given equation yields $q = s + 29r$. Therefore, the equation $q = s + 29r$ correctly expresses q in terms of r and s.

Choice A is incorrect and may result from conceptual or calculation errors.

Choice C is incorrect and may result from conceptual or calculation errors.

Choice D is incorrect and may result from conceptual or calculation errors.

Question Difficulty: Easy

Question ID 17ce8f0e

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear equations in one variable and systems of equations in two variables	Easy

$$x = 3$$
$$y = (15 - x)^2$$

A solution to the given system of equations is (x, y). What is the value of xy?

A. 432

B. 54

C. 45

D. 18

Correct Answer: A

Rationale

Choice A is correct. The first equation in the given system of equations is $x = 3$. Substituting 3 for x in the second equation in the given system of equations yields $y = (15 - 3)^2$, or $y = 144$. Substituting 3 for x and 144 for y in the expression xy yields $(3)(144)$, or 432. Therefore, the value of xy is 432.

Choice B is incorrect and may result from conceptual or calculation errors.

Choice C is incorrect and may result from conceptual or calculation errors.
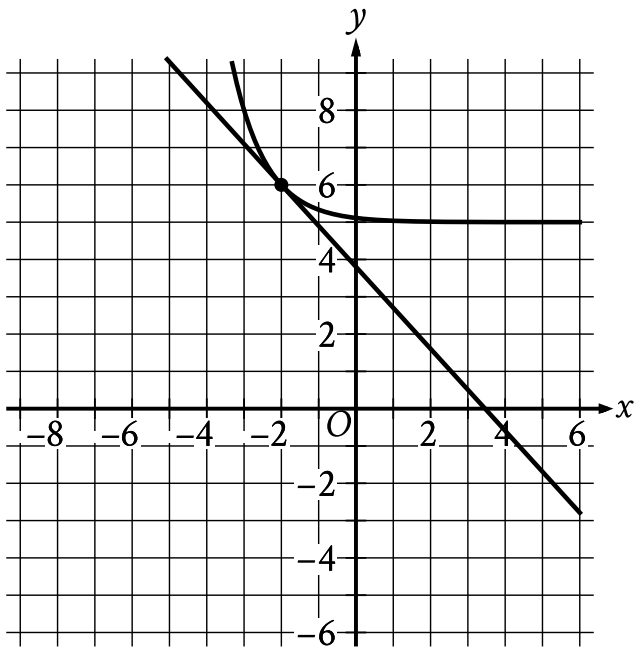
Choice D is incorrect and may result from conceptual or calculation errors.

Question Difficulty: Easy

Question ID 67303cf4

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Advanced Math	Nonlinear equations in one variable and systems of equations in two variables	Easy

The graph of a system of a linear equation and a nonlinear equation is shown. What is the solution (x, y) to this system?

A. $(6, 0)$

B. $(-2, 6)$

C. $(0, -2)$

D. $(0, 0)$

Correct Answer: B

Rationale

Choice B is correct. The solution (x, y) to the system of two equations corresponds to the point where the graphs of the equations intersect in the xy-plane. The graphs of the linear equation and the nonlinear equation shown intersect at the point $(-2, 6)$. Thus, the solution (x, y) to this system is $(-2, 6)$.

Choice A is incorrect and may result from conceptual or calculation errors.

Choice C is incorrect and may result from conceptual or calculation errors.

Choice D is incorrect and may result from conceptual or calculation errors.

Question Difficulty: Easy