

Free Accuplacer (2024) Questions

Reading

In the heart of the dense Amazon rainforest, a unique ecosystem thrives. Towering trees adorned with vibrant orchids create a canopy that teems with life. Beneath this leafy expanse, elusive creatures such as jaguars and vibrant poison dart frogs find their refuge. This delicate balance, however, faces threats from deforestation and climate change, endangering the rich biodiversity that defines this enchanted realm.

Question: What is the main theme of the passage?

Answer: Threats to Amazon biodiversity

Question: According to the passage, what creatures find refuge in the Amazon rainforest?

Answer: Jaguars and poison dart frogs

Question: Choose the synonym for the word "elusive" as used in the passage.

Answer: Evasive

Question: What is the impact of deforestation on the Amazon rainforest, as mentioned in the passage?

Answer: Endangered biodiversity

Question: Select the appropriate title for the passage.

Answer: "Threats to Amazon Biodiversity"

Climate change is a global challenge that demands urgent attention. Rising temperatures, extreme weather events, and melting ice caps are just a few indicators of the planet's changing climate. The consequences of these changes are far-reaching, affecting ecosystems, economies, and human well-being. As we confront this crisis, it becomes imperative to explore sustainable solutions and foster a collective commitment to preserving the health of our planet.

Question: What is the main theme of the passage?

Answer: Consequences of climate change

Question: According to the passage, what are indicators of the changing climate?

Answer: Melting ice caps

Question: Choose the synonym for the word "imperative" as used in the passage.

Answer: Necessary

Question: What does the passage suggest is affected by the consequences of climate change?

Answer: Human well-being

Artificial intelligence (AI) has become an integral part of various industries, from healthcare to finance. The ability of machines to analyze vast amounts of data and make complex decisions has revolutionized processes and services. However, this advancement also raises ethical concerns regarding privacy, job

displacement, and the potential misuse of AI. Striking a balance between technological progress and ethical considerations is crucial as we navigate the ever-evolving landscape of artificial intelligence.

Question: What is the main theme of the passage?

Answer: Ethical concerns in artificial intelligence

Question: According to the passage, what has AI revolutionized?

Answer: Processes and services

Question: Choose the antonym for the word "integral" as used in the passage.

Answer: Peripheral

Question: What ethical concerns are mentioned in the passage?

Answer: Privacy, job displacement, and potential misuse of AI

The exploration of space has captivated human imagination for centuries. Advances in technology have allowed us to send probes and rovers to distant planets, uncovering the mysteries of our solar system. However, space exploration is not without challenges. The vast distances, harsh environments, and the potential impact on Earth's resources raise questions about the feasibility and sustainability of future space missions. As we reach further into the cosmos, the balance between scientific discovery and responsible stewardship of our planet becomes paramount.

Question: What is the main theme of the passage?

Answer: Challenges of space exploration

Question: According to the passage, what raises questions about future space missions?

Answer: Potential impact on Earth's resources

Question: Choose the synonym for the word "captivated" as used in the passage.

Answer: Enthralled

Question: What becomes paramount as we reach further into the cosmos, according to the passage?

Answer: Responsible stewardship and scientific discovery

The importance of biodiversity cannot be overstated. Ecosystems thrive when a variety of species coexist, each playing a unique role in maintaining balance. Human activities, however, pose a threat to biodiversity through habitat destruction, pollution, and climate change. As we witness the decline of certain species and ecosystems, it becomes imperative to promote conservation efforts, raise awareness, and implement sustainable practices to preserve the rich tapestry of life on our planet.

Question: What is the primary reason ecosystems thrive when a variety of species coexist?

Answer: To maintain balance

Question: How do human activities pose a threat to biodiversity, as mentioned in the passage?

Answer: Through habitat destruction, pollution, and climate change

Question: What is emphasized as imperative in the passage to preserve the rich tapestry of life on our planet?

Answer: Promoting conservation efforts

In the digital age, the impact of technology on education is profound. Online learning platforms have revolutionized the way students access information and engage with course materials. Traditional classrooms now coexist with virtual spaces, offering flexibility but also posing challenges. As we navigate this evolving landscape, it is crucial to examine both the benefits and drawbacks of technology's role in shaping the future of education.

Question: What is the main theme of the passage?

Answer: The impact of technology on education

Question: According to the passage, what has revolutionized the way students access information?

Answer: Virtual spaces

Question: Choose the antonym for the word "profound" as used in the passage.

Answer: Superficial

Question: What is mentioned as a drawback of the integration of technology in education?

Answer: Posing challenges

Question: Select the appropriate title for the passage.

Answer: "The Digital Age in Education"

Arithmetic

Question: The average age of a group of friends is 30 years. If two friends, aged 25 and 35, join the group, what is the new average age?

Answer: 31

Question: The product of two consecutive positive integers is 72. What are the integers?

Answer: 8 and 9

Question: A rectangular garden has a length of 15 meters and a width of 8 meters. What is the area of the garden?

Answer: 120 square meters

Question: If the perimeter of a square is 40 centimeters, what is the length of one side?

Answer: 10 cm

Question: A car travels at a speed of 60 kilometers per hour. How far will it travel in 3 hours?

Answer: 150 km

Question: Solve for x: $2x - 5 = 15$.

Answer: 10

Question: The ratio of boys to girls in a class is 3:2. If there are 15 boys, how many girls are there?

Answer: 10

Question: If the area of a circle is 64 square centimeters, what is the radius?

Answer: 4 cm

Question: The sum of three consecutive odd integers is 51. What are the integers?

Answer: 15, 17, 19

Question: If $3x - 7 = 14$, what is the value of x ?

Answer: 6

Question: The perimeter of a triangle is 24 meters. If one side is 8 meters and another is 6 meters, what is the length of the third side?

Answer: 6 meters

Question: Solve for y : $2y + 3 = 11$.

Answer: 4

Question: The sum of two consecutive even integers is 28. What are the integers?

Answer: 14, 16

Question: A box contains 5 red balls, 4 blue balls, and 3 green balls. If one ball is randomly chosen, what is the probability of selecting a red ball?

Answer: $\frac{2}{3}$

Question: If $4x + 9 = 21$, what is the value of x ?

Answer: 3

Question: A train travels at a speed of 80 km/h. How long will it take to travel 240 kilometers?

Answer: 4 hours

Question: The sum of two numbers is 48. If one number is 20, what is the other number?

Answer: 28

Question: Solve for z : $(\frac{3z}{2}) = 15$.

Answer: 10

Question: The hypotenuse of a right-angled triangle is 13 cm, and one leg is 5 cm. What is the length of the other leg?

Answer: 12 cm

Question: The difference between a number and 7 is 15. What is the number?

Answer: 22

Question: The area of a rectangle is 48 square meters, and the length is 8 meters. What is the width?

Answer: 6 meters

Question: Solve for k: $(2k - 1)/3 = 5$.

Answer: 7

Quantitative Reasoning, Algebra, and Statistics (QAS)

Question: Simplify the expression: $(3x^2 + 2x - 7)$ when $(x = 4)$.

Answer: 53

Question: If $(a + 2b = 10)$ and $(2a - b = 4)$, what is the value of (a) ?

Answer: 4

Question: Solve the equation: $(2x - 5 = 3x + 1)$.

Answer: 2

Question: A rectangular garden has a length of $(5x + 3)$ meters and a width of $(2x - 1)$ meters. What is the area of the garden?

Answer: $(10x^2 + x - 3)$

Question: The sum of three consecutive even integers is 54. What are the integers?

Answer: 20, 22, 24

Question: If $(2^a = 8)$, what is the value of (a) ?

Answer: 3

Question: A box contains 3 red balls, 4 blue balls, and 5 green balls. If one ball is randomly chosen, what is the probability of selecting a blue ball?

Answer: $1/3$

Question: If $(x^2 - 9 = 0)$, what are the solutions for (x) ?

Answer: -3 and 3

Question: The sum of two numbers is 25. If one number is 12, what is the other number?

Answer: 13

Question: Solve for (y) : $(2y + 7 = 15)$.

Answer: 6

Question: The length of a rectangle is $(3x + 2)$ and the width is $(x - 1)$. What is the area of the rectangle?

Answer: $(3x^2 + x - 2)$

Question: The perimeter of a square is $(24x)$ centimeters. What is the length of one side?

Answer: $6x$

Question: If $(4^b = 16)$, what is the value of (b) ?

Answer: 2

Question: The sum of three consecutive odd integers is 69. What are the integers?

Answer: 25, 27, 29

Question: Solve the inequality: $(2x - 3 < 7)$.

Answer: $x < 5$

Question: A right-angled triangle has legs of lengths (a) and (b) and a hypotenuse of length (c) . If $(a = 3)$ and $(b = 4)$, what is the length of (c) ?

Answer: 5

Question: Simplify the expression: $(\sqrt{16} + \sqrt{25})$.

Answer: 10

Question: If $(5x - 3 = 2x + 7)$, what is the value of (x) ?

Answer: 2

Question: The area of a circle is (36π) square centimeters. What is the radius?

Answer: 6 cm

Question: The sum of two consecutive integers is 19. What are the integers?

Answer: 10 and 11

Question: Solve for (z) : $(4z/3 = 8)$.

Answer: 6

Question: A triangle has angles of $(2x)$, $(3x - 10)$, and $(4x + 20)$. What is the sum of the angles?

Answer: 190 degrees

Question: If $(x^2 + 5x + 6 = 0)$, what are the solutions for (x) ?

Answer: -2 and -3

Question: The sum of four consecutive integers is 70. What are the integers?

Answer: 18, 19, 20, 21

Question: Solve for (k) : $(3k - 2/4 = 5)$.

Answer: 8

Question: The length of a rectangle is $(2x + 1)$ meters and the width is $(x - 2)$ meters. What is the perimeter of the rectangle?

Answer: $(6x + 1)$

Question: The sum of two numbers is 30. If one number is 18, what is the other number?

Answer: 15

Advance Algebra and Functions

Question: Simplify the expression: $(2x^2 - 5x + 3)$ when $x = 3$.

Answer: 9

Question: If $a^2 + b^2 = 25$ and $ab = 12$, what are the possible values of a and b ?

Answer: 4, 3

Question: Solve the system of equations: $(2x + 3y = 8, x - 2y = -4)$.

Answer: $x = 4, y = 0$

Question: Factorize the expression: $x^2 + 5x + 6$.

Answer: $(x + 2)(x + 3)$

Question: Solve the inequality: $3x - 7 > 2x + 5$.

Answer: $x > 12$

Question: Find the value of x in the equation $2^{(x+1)} = 16$.

Answer: 4

Question: Expand and simplify: $(a - b)^2$.

Answer: $a^2 - 2ab + b^2$

Question: If $f(x) = 2x^3 - x^2 + 3x - 5$, what is $f(-1)$?

Answer: -4

Question: Solve the equation: $(\frac{2}{3})x - 4 = 8$.

Answer: $x = 9$

Question: If $g(x) = (\frac{1}{2})(x - 3)^2$, what is $g(3)$?

Answer: 0

Question: Factorize the expression: $4y^2 - 1$.

Answer: $(2y - 1)(2y + 1)$

Question: If $h(x) = \frac{(x^2 - 4)}{(x + 2)}$, what is $h(-2)$?

Answer: 2

Question: Solve the system of equations: $(3x + 4y = 10, 2x - y = 5)$.

Answer: $x = 1, y = 2$

Question: Evaluate the expression: $5!/2!$.

Answer: 120

Question: If $k^2 - 3k + 2 = 0$, what are the solutions for k ?

Answer: $k = 2, 1$

Question: Simplify the expression: $|2x - 7| - |3x + 4|$.

Answer: $-x + 11$

Question: If $n!$ represents the product of all positive integers up to n , what is the value of $4!$?

Answer: 24

Question: Find the range of the function $f(x) = 2x^2 + 4x - 3$.

Answer: All real numbers

Question: Solve the equation: $\log_2(x + 3) = 2$.

Answer: $x = 6$

Question: If p and q are positive integers such that $p + q = 15$ and $pq = 56$, what are the values of p and q ?

Answer: $p = 7, q = 8$

Question: Simplify the expression: $\sqrt{50} - \sqrt{18}$.

Answer: $\sqrt{3}$

Question: If m is an integer such that $3 \leq m \leq 8$, how many possible values can m take?

Answer: 5

Question: Evaluate the expression: $\cos^2 30^\circ + \sin^2 30^\circ$.

Answer: 1

Question: If x and y are real numbers such that $x^2 + y^2 = 10$ and $xy = 3$, what is $x + y$?

Answer: 5

Question: Solve the equation: $2^x = 16$.

Answer: 4

Question: If $f(x) = x^2 + 4x + 4$, what is $f(-2)$?

Answer: 8

Elementary Algebra

Question: What is the solution to the equation $3x - 4 = 11$?

Answer: 5

Question: If $5x + 3 = 2x - 4$, what is the value of x ?

Answer: 2.33

Question: Simplify: $4(3x - 5) + 6$.

Answer: $12x - 14$

Question: What is the product of $(x - 4)(x + 5)$?

Answer: $x^2 + 9x - 20$

Question: If $f(x) = 2x + 3$, what is $f(5)$?

Answer: 13

Question: Solve for x : $2x/3 = 8$.

Answer: 12

Question: What is the slope of the line represented by the equation $2y = 4x + 6$?

Answer: 1

Question: What is the y-intercept of the line $3x - 6y = 12$?

Answer: 2

Question: If $x/4 - 3 = 5$, what is the value of x ?

Answer: 32

Question: Simplify the expression: $3x^2 - 2x + 5x^2 - 3x$.

Answer: $8x^2 - x$

Question: Solve: $5(x - 2) = 3(x + 4)$.

Answer: 6

Question: What is the solution set for the inequality $x - 5 > 7$?

Answer: $x > 12$

Question: Which of the following represents the factorization of $9x^2 - 25$?

Answer: $(3x + 5)(3x - 5)$

Question: Simplify the expression: $(x^3)^2$.

Answer: x^6

Question: If $4x - 2 = 10$, what is x ?

Answer: 3

Question: Solve for x in the equation: $x/2 + 3 = 7$.

Answer: 8

Question: What is the area of a rectangle with length 8 cm and width 5 cm?

Answer: 40 cm^2

Question: If y varies inversely as x , and $y = 2$ when $x = 6$, what is the value of y when $x = 3$?

Answer: 4

Question: What is the solution to the equation $3(x - 2) = 9$?

Answer: 5

Question: If the perimeter of a square is 20 cm, what is the length of each side?

Answer: 5 cm

Question: What is the next number in the sequence 2, 4, 8, 16?

Answer: 32

Question: What is the greatest common factor of 36 and 54?

Answer: 18

Question: Solve the equation: $4x + 7 = 19$.

Answer: 3

Question: If $3x + 2y = 12$ and $x = 4$, what is y ?

Answer: 0

Question: Simplify the expression: $7x - 3 - (2x + 5)$.

Answer: $5x - 8$

Question: What is the value of x in the equation $5(x - 3) = 2x + 7$?

Answer: 5

Question: Simplify: $(x^2 - 2x) - (3x^2 + 4x)$.

Answer: $-2x^2 - 6x$

Question: If the perimeter of a rectangle is 30 cm and its length is 10 cm, what is its width?

Answer: 5 cm

Question: Solve for y : $3y - 5 = 16$.

Answer: 7

Question: What is the quadratic formula?

Answer: $-b \pm \sqrt{b^2 - 4ac} / 2a$

Question: What is the slope-intercept form of a linear equation?

Answer: $y = mx + b$

Question: Simplify the expression: $9x - 4(2x - 3)$.

Answer: $x + 12$

Question: If $x^2 = 81$, what are the possible values of x ?

Answer: 9 and -9

Question: What is the average of the first five positive even numbers?

Answer: 6

Question: Solve for x in the proportion: $\frac{3}{4} = \frac{x}{12}$.

Answer: 9

Question: If the sum of two numbers is 15 and their difference is 3, what is the larger number?

Answer: 9

Question: What is the area of a triangle with base 10 cm and height 4 cm?

Answer: 20 cm^2

Question: Simplify the expression: $(3x^3) * (2x^2)$.

Answer: $6x^5$

Question: If 5 times a number minus 2 equals 13, what is the number?

Answer: 3

Question: What is the solution to the inequality $2x + 3 < 11$?

Answer: $x < 4$

Question: What is the result of simplifying the expression $2x - 3 + 5x + 6$?

Answer: $7x + 3$

Question: Solve the equation: $2(x - 3) = 4$.

Answer: 3

Question: What is the solution to the inequality $3x + 4 > 10$?

Answer: $x > 2$

Question: Simplify: $6x^2 / 2x$.

Answer: $3x$

Question: If $x - 2y = 10$ and $x = 14$, what is y ?

Answer: 2

Question: Simplify the expression: $(x - 3)^2$.

Answer: $x^2 - 6x + 9$

Question: What is the area of a circle with radius 4 cm? (Use $\pi = 3.14$)

Answer: 50.24 cm²

Question: If $5x = 25$, what is x ?

Answer: 5

Question: What is the slope of a line parallel to the line defined by the equation $y = 4x + 3$?

Answer: 4

Question: If $3y - 2 = 4y + 1$, what is the value of y ?

Answer: -1

Question: What is the value of ' x ' in the equation $4(x + 1) = 16$?

Answer: 3

Question: Simplify: $5y - 2(3y - 4)$.

Answer: $-y + 8$

Question: What is the volume of a cube with side length 3 cm?

Answer: 27 cm³

Question: If the equation of a line is $y = -2x + 5$, what is the y -intercept?

Answer: 5

Question: Solve for x : $x/5 + 2 = 7$.

Answer: 15

Question: What is the least common multiple of 4 and 6?

Answer: 12

Question: If a triangle has sides of lengths 3, 4, and 5, what is its area?

Answer: 6

Question: Simplify the expression: $2(x + 3) - 4x$.

Answer: $-2x + 6$

Question: What are the roots of the equation $x^2 - 4 = 0$?

Answer: 2 and -2

Question: What is the midpoint of a line segment with endpoints (2, 3) and (4, -1)?

Answer: (3, 1)

Question: If $2x + 5 = 17$, what is the value of x ?

Answer: 6

Question: Solve the equation: $x/3 - 2 = 5$.

Answer: 21

Question: What is the product of $(x + 2)(x - 3)$?

Answer: $x^2 - x - 6$

Question: Simplify: $9 - 3(2x - 4)$.

Answer: $-6x + 21$

Question: If $4x = 2x + 10$, what is x ?

Answer: 5

Question: What is the slope of the line $y = -3x + 4$?

Answer: -3

Question: Simplify: $(3x^2)(4x^3)$.

Answer: $12x^6$

Question: Solve for x : $5x - 6 = 3x + 8$.

Answer: 7

Question: What is the value of $3x^2$ when $x = 4$?

Answer: 48

Question: Simplify: $4y + 3 - 2y$.

Answer: $2y + 3$

Question: Solve: $3(x - 4) = 9$.

Answer: 7

Question: If the perimeter of a square is 24 cm, what is the length of one side?

Answer: 6 cm

Question: Solve for x : $2x - 4 = 10$.

Answer: 7

Question: What is the area of a triangle with base 8 cm and height 5 cm?

Answer: 20 cm^2

Question: If $x + y = 10$ and $x - y = 4$, what is the value of x ?

Answer: 7

Question: Simplify the expression: $2(x + 4) + 3(x - 2)$.

Answer: $5x + 10$

Question: What is the greatest common factor of 28 and 42?

Answer: 14

Question: If the volume of a cube is 27 cubic units, what is the length of each side?

Answer: 3 units

Question: Solve the inequality: $5x - 7 > 8$.

Answer: $x > 3$

Question: What is the product of $(3x - 2)(2x + 5)$?

Answer: $6x^2 + 11x - 10$

Question: What is the result of simplifying the expression $3x + 4x - 7$?

Answer: $7x - 7$

Question: Solve the equation: $3(2x - 1) = 12$.

Answer: 2

Question: What is the solution to the inequality $4x - 5 < 11$?

Answer: $x < 4$

Question: Simplify: $(x^3)(x^2)$.

Answer: x^5

Question: If $5y + 3 = 23$, what is y ?

Answer: 4

Question: What is the slope of the line $y = 5x - 7$?

Answer: 5

Question: Simplify: $(2x^4) / (x^2)$.

Answer: $2x^2$

Question: Solve for x : $6x + 9 = 3x - 6$.

Answer: -5

Question: What is the value of x^3 when $x = 3$?

Answer: 27

Question: Simplify: $5z + 4 - 3z$.

Answer: $2z + 4$

Question: Solve: $4(x - 5) = 16$.

Answer: 8

Question: If the perimeter of a rectangle is 50 cm and its length is 15 cm, what is its width?

Answer: 10 cm

Question: Solve for x: $3x/4 = 15$.

Answer: 20

Question: What is the area of a triangle with base 6 cm and height 9 cm?

Answer: 54 cm^2

Question: If $3x - 2y = 6$ and $x = 4$, what is y?

Answer: 3

Question: Simplify the expression: $4(x - 5) + 2(x + 3)$.

Answer: $6x - 14$

Question: What is the least common multiple of 3 and 7?

Answer: 21

Question: If a square has an area of 64 square units, what is the length of each side?

Answer: 8 units

Question: Solve the inequality: $2x + 6 \geq 10$.

Answer: $x \geq 2$

Question: What is the product of $(2x + 3)(3x - 4)$?

Answer: $6x^2 + 5x - 12$

Question: If $3x + 6 = 21$, what is x?

Answer: 5

Question: Solve the equation: $7x - 3 = 25$.

Answer: 4

Question: What is the product of $(x + 4)(x - 5)$?

Answer: $x^2 - x - 20$

Question: Simplify: $12 - 4(3x - 5)$.

Answer: $-12x + 32$

Question: If $6x = 3x + 15$, what is x?

Answer: 5

Question: What is the slope of the line $y = -2x + 5$?

Answer: -2

Question: Simplify: $(3x^5) / (x^3)$.

Answer: $3x^2$

Question: Solve for x: $8x - 10 = 4x + 6$.

Answer: 4

Question: What is the value of $4x^2$ when $x = 2$?

Answer: 16

Question: Simplify: $7a - 5 + 2a$.

Answer: $9a - 5$

Question: Solve: $2(x + 3) = 10$.

Answer: 4

Question: If the perimeter of a triangle is 30 cm and one side is 10 cm, what is the sum of the lengths of the other two sides?

Answer: 20 cm

Question: Solve for x: $x/5 = 3$.

Answer: 15

Question: What is the area of a rectangle with length 7 cm and width 3 cm?

Answer: 21 cm^2

Question: If $2x + y = 12$ and $x = 5$, what is y?

Answer: 2

Question: Simplify the expression: $5(x - 2) + 3(x + 4)$.

Answer: $8x + 10$

Question: What is the least common multiple of 5 and 9?

Answer: 45

Question: If a cube has a volume of 125 cubic units, what is the length of each side?

Answer: 5 units

Question: Solve the inequality: $3x + 9 \geq 12$.

Answer: $x \geq 1$

Question: What is the product of $(3x - 4)(2x + 6)$?

Answer: $6x^2 - 8x - 24$

Question: If $7x - 4 = 17$, what is x?

Answer: 4

Question: Solve the equation: $9 - 3x = 0$.

Answer: 3

Question: What is the product of $(x - 6)(x + 6)$?

Answer: $x^2 - 36$

Question: Simplify: $15 - 5(2x - 3)$.

Answer: $-10x + 15$

Question: If $8x = 16$, what is x ?

Answer: 2

Question: What is the slope of the line $y = 2x + 3$?

Answer: 2

Question: Simplify: $(4x^3) / (2x)$.

Answer: $2x^2$

Question: Solve for x : $12x + 5 = 9x + 20$.

Answer: 5

Question: What is the value of $5x^2$ when $x = 3$?

Answer: 45

Question: Simplify: $3z + 5 - 4z$.

Answer: $-z + 5$

Question: Solve: $7(x - 2) = 35$.

Answer: 7

Question: If the perimeter of a rectangle is 40 cm and its length is 12 cm, what is its width?

Answer: 8 cm

Question: Solve for x : $x/7 = 14$.

Answer: 98

Question: What is the area of a square with sides of length 5 cm?

Answer: 25 cm^2

Question: If $x + 2y = 14$ and $x = 6$, what is y ?

Answer: 3

Question: Simplify the expression: $6(x - 4) + 4(x + 2)$.

Answer: $10x - 16$

Question: What is the least common multiple of 6 and 8?

Answer: 24

Question: If a cube has a volume of 64 cubic units, what is the length of each side?

Answer: 4 units

Question: Solve the inequality: $4x - 8 \geq 16$.

Answer: $x \geq 6$

Question: What is the product of $(2x - 3)(3x + 4)$?

Answer: $6x^2 + 5x - 12$

Question: If $5x - 3 = 22$, what is x ?

Answer: 5

Question: Solve the equation: $4x + 5 = 21$.

Answer: 4

Question: What is the product of $(x - 7)(x + 7)$?

Answer: $x^2 - 49$

Question: Simplify: $18 - 6(2x - 4)$.

Answer: $-12x + 24$

Question: If $10x = 20$, what is x ?

Answer: 2

Question: What is the slope of the line $y = 3x + 4$?

Answer: 3

Question: Simplify: $(6x^4) / (3x)$.

Answer: $2x^3$

Question: Solve for x : $15x + 7 = 12x + 22$.

Answer: 3

Question: What is the value of $6x^2$ when $x = 2$?

Answer: 24

Question: Simplify: $8a + 6 - 5a$.

Answer: $3a + 6$

Question: Solve: $8(x - 3) = 40$.

Answer: 5

Question: If the perimeter of a square is 36 cm, what is the length of one side?

Answer: 9 cm

Question: Solve for x: $x/8 = 16$.

Answer: 128

Question: What is the area of a rectangle with length 10 cm and width 6 cm?

Answer: 60 cm^2

Question: If $3x + 4y = 22$ and $x = 2$, what is y?

Answer: 5

Question: Simplify the expression: $7(x - 6) + 5(x + 4)$.

Answer: $12x - 22$

Question: What is the least common multiple of 7 and 9?

Answer: 63

Question: If a cube has a volume of 125 cubic units, what is the length of each side?

Answer: 5 units

Question: Solve the inequality: $5x - 10 \geq 15$.

Answer: $x \geq 5$

Question: What is the product of $(4x - 5)(2x + 6)$?

Answer: $8x^2 - 22x - 30$

Question: If $9x - 2 = 25$, what is x?

Answer: 3

Question: Solve the equation: $5x - 6 = 19$.

Answer: 5

Question: What is the product of $(x + 8)(x - 8)$?

Answer: $x^2 - 64$

Question: Simplify: $20 - 7(2x - 3)$.

Answer: $-14x + 20$

Question: If $12x = 24$, what is x?

Answer: 2

Question: What is the slope of the line $y = 4x - 2$?

Answer: 4

Question: Simplify: $(8x^5) / (4x^2)$.

Answer: $2x^3$

Question: Solve for x: $18x + 8 = 15x + 23$.

Answer: 7

Question: What is the value of $7x^2$ when $x = 3$?

Answer: 63

Question: Simplify: $9b + 7 - 6b$.

Answer: $3b + 7$

Question: Solve: $9(x - 4) = 45$.

Answer: 5

Question: If the perimeter of a pentagon is 50 cm and one side is 15 cm, what is the average length of the other sides?

Answer: 8.75 cm

Question: Solve for x: $x/9 = 18$.

Answer: 162

Question: What is the area of a parallelogram with base 10 cm and height 5 cm?

Answer: 50 cm^2

Question: If $4x + 3y = 24$ and $x = 3$, what is y?

Answer: 5

Question: Simplify the expression: $8(x - 7) + 6(x + 5)$.

Answer: $14x - 26$

Question: What is the least common multiple of 8 and 10?

Answer: 40

Question: If a cube has a volume of 216 cubic units, what is the length of each side?

Answer: 6 units

Question: Solve the inequality: $6x - 12 \geq 18$.

Answer: $x \geq 5$

Question: What is the product of $(5x - 6)(3x + 7)$?

Answer: $15x^2 - 11x - 42$

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