Chartered Accountants -Foundation Course

J. Maria Joseph PhD

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9. Februar 2018

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The equation -7x + 1 = 5 - 3x will be satisfied for x equal to:

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Options

(a) 2 (b) -1 (c) 1 (d) none of these

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Options

(a) 2 (b) -1 (c) 1 (d) none of these

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The root of the equation
$$\frac{x+4}{4} + \frac{x-5}{3} = 11$$
 is

The root of the equation
$$\frac{x+4}{4} + \frac{x-5}{3} = 11$$
 is

Options

(a) 20 (b) 10 (c) 2 (d) none of these

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The root of the equation
$$\frac{x+4}{4} + \frac{x-5}{3} = 11$$
 is

Options (a) 20 (b) 10 (c) 2 (d) none of these

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Pick up the correct value of x for $\frac{x}{30} = \frac{2}{45}$

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Pick up the correct value of x for
$$\frac{x}{30} = \frac{2}{45}$$

Options

(a)
$$x = 5$$
 (b) $x = 7$ (c) $x = 1\frac{1}{3}$ (d) none of these

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Pick up the correct value of x for
$$\frac{x}{30} = \frac{2}{45}$$

Options

(a)
$$x = 5$$
 (b) $x = 7$ (c) $x = 1\frac{1}{3}$ (d) none of these

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The solution of the equation
$$\frac{x+24}{5} = 4 + \frac{x}{4}$$

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Options

(a) 6 (b) 10 (c) 16 (d) none of these

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The solution of the equation
$$\frac{x+24}{5} = 4 + \frac{x}{4}$$

Options (a) 6 (b) 10 (c) 16 (d) none of these

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8 is the solution of the equation

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Options

(a)
$$\frac{x+4}{4} + \frac{x-5}{3} = 11$$
 (b) $\frac{x+4}{2} + \frac{x+10}{9} = 8$
(c) $\frac{x+24}{5} = 4 + \frac{x}{4}$ (d) $\frac{x-15}{10} + \frac{x+5}{5} = 4$

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8 is the solution of the equation

Options

(a)
$$\frac{x+4}{4} + \frac{x-5}{3} = 11$$
 (b) $\frac{x+4}{2} + \frac{x+10}{9} = 8$
(c) $\frac{x+24}{5} = 4 + \frac{x}{4}$ (d) $\frac{x-15}{10} + \frac{x+5}{5} = 4$

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The value of y that satisfies the equation $\frac{y+11}{6} - \frac{y+1}{9} = \frac{y+7}{4}$ is

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The value of y that satisfies the equation $\frac{y+11}{6} - \frac{y+1}{9} = \frac{y+7}{4}$ is

Options

(a)-1 (b) 7 (c) 1 (d)
$$-\frac{1}{7}$$

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The value of y that satisfies the equation $\frac{y+11}{6} - \frac{y+1}{9} = \frac{y+7}{4}$ is

Options

(a)-1 (b) 7 (c) 1 (d)
$$-\frac{1}{7}$$

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The solution of the equation (p+2)(p-3) + (p+3)(p-4) = p(2p5) is

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Options

(a) 6 (b) 7 (c) 5 (d) none of these

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The solution of the equation (p+2)(p-3) + (p+3)(p-4) = p(2p5) is

Options

(a) 6 (b) 7 (c) 5 (d) none of these

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Question The equation $\frac{12x+1}{4} = \frac{15x-1}{5} + \frac{2x-5}{3x-1}$ is true for

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The equation
$$\frac{12x+1}{4} = \frac{15x-1}{5} + \frac{2x-5}{3x-1}$$
 is true for

Options

(a) x = 1 (b) x = 2 (c) x = 5 (d) x = 7

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Question The equation $\frac{12x+1}{4} = \frac{15x-1}{5} + \frac{2x-5}{3x-1}$ is true for

Options

(a)
$$x = 1$$
 (b) $x = 2$ (c) $x = 5$ (d) $x = 7$

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Question Pick up the correct value x for which $\frac{x}{0.5} - \frac{1}{0.05} + \frac{x}{0.005} - \frac{1}{0.0005} = 0$

Pick up the correct value x for which
$$\frac{x}{0.5} - \frac{1}{0.05} + \frac{x}{0.005} - \frac{1}{0.0005} = 0$$

Options

(a)
$$x = 0$$
 (b) $x = 1$ (c) $x = 10$ (d) none of these

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Pick up the correct value x for which $\frac{x}{0.5} - \frac{1}{0.05} + \frac{x}{0.005} - \frac{1}{0.0005} = 0$

Options

(a)
$$x = 0$$
 (b) $x = 1$ (c) $x = 10$ (d) none of these

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The sum of two numbers is 52 and their difference is 2. The numbers are

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Options

(a) 17 and 15 (b) 12 and 10 (c) 27 and 25 (d) none of these

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Options

(a) 17 and 15 (b) 12 and 10 (c) 27 and 25 (d) none of these

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The diagonal of a rectangle is 5 cm and one of at sides is 4 cm. Its area is

The diagonal of a rectangle is 5 cm and one of at sides is 4 cm. Its area is

Options

(a) 20 sq.cm. (b) 12 sq.cm. (c) 10 sq.cm. (d) none of these

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The diagonal of a rectangle is 5 cm and one of at sides is 4 cm. Its area is

Options

(a) 20 sq.cm. (b) 12 sq.cm. (c) 10 sq.cm. (d) none of these

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Divide 56 into two parts such that three times the first part exceeds one third of the second by 48. The parts are.

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Options

(a) (20, 36) (b) (25, 31) (c) (24, 32) (d) none of these

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Divide 56 into two parts such that three times the first part exceeds one third of the second by 48. The parts are.

Options (a) (20, 36) (b) (25, 31) (c) (24, 32) (d) none of these

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The sum of the digits of a two digit number is 10. If 18 be subtracted from it the digits in the resulting number will be equal. The number is

The sum of the digits of a two digit number is 10. If 18 be subtracted from it the digits in the resulting number will be equal. The number is

Options (a) 37 (b) 73 (c) 75 (d) none of these

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The sum of the digits of a two digit number is 10. If 18 be subtracted from it the digits in the resulting number will be equal. The number is

Options

(a) 37 (b) 73 (c) 75 (d) none of these

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The fourth part of a number exceeds the sixth part by 4. The number is

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Options

(a) 84 (b) 44 (c) 48 (d) none of these

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Options (a) 84 (b) 44 (c) 48 (d) none of these

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Ten years ago the age of a father was four times of his son. Ten years hence the age of the father will be twice that of his son. The present ages of the father and the son are.

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Options

(a) (50, 20) (b) (60, 20) (c) (55, 25) (d) none of these

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Options

(a) (50, 20) (b) (60, 20) (c) (55, 25) (d) none of these

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The product of two numbers is 3200 and the quotient when the larger number is divided by the smaller is 2. The numbers are

The product of two numbers is 3200 and the quotient when the larger number is divided by the smaller is 2. The numbers are

Options

(a) (16, 200) (b) (160, 20) (c) (60, 30) (d) (80, 40)

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The product of two numbers is 3200 and the quotient when the larger number is divided by the smaller is 2. The numbers are

Options

(a) (16, 200) (b) (160, 20) (c) (60, 30) (d) (80, 40)

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The denominator of a fraction exceeds the numerator by 2. If 5 be added to the numerator the fraction increases by unity. The fraction is.

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Options (a) $\frac{5}{7}$ (b) $\frac{1}{3}$ (c) $\frac{7}{9}$ (d) $\frac{3}{5}$

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The denominator of a fraction exceeds the numerator by 2. If 5 be added to the numerator the fraction increases by unity. The fraction is.

Options
(a)
$$\frac{5}{7}$$
 (b) $\frac{1}{3}$ (c) $\frac{7}{9}$ (d) $\frac{3}{5}$

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Three persons Mr. Roy, Mr. Paul and Mr. Singh together have *Rs*.51. Mr. Paul has *Rs*.4 less than Mr. Roy and Mr. Singh has got *Rs*.5 less than Mr. Roy. They have the money as.

Three persons Mr. Roy, Mr. Paul and Mr. Singh together have *Rs*.51. Mr. Paul has *Rs*.4 less than Mr. Roy and Mr. Singh has got *Rs*.5 less than Mr. Roy. They have the money as.

Options

(a) (Rs. 520, Rs. 16, Rs. 15) (b) (Rs. 15, Rs. 20, Rs. 16) (c) (Rs. 25, Rs. 11, Rs. 15) (d) none of these

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Three persons Mr. Roy, Mr. Paul and Mr. Singh together have *Rs*.51. Mr. Paul has *Rs*.4 less than Mr. Roy and Mr. Singh has got *Rs*.5 less than Mr. Roy. They have the money as.

Options

(a) (Rs. 520, Rs. 16, Rs. 15) (b) (Rs. 15, Rs. 20, Rs. 16) (c) (Rs. 25, Rs. 11, Rs. 15) (d) none of these

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A number consists of two digits. The digits in the ten's place is 3 times the digit in the unit's place. If 54 is subtracted from the number the digits are reversed. The number is

A number consists of two digits. The digits in the ten's place is 3 times the digit in the unit's place. If 54 is subtracted from the number the digits are reversed. The number is

Options

(a) 39 (b) 92 (c) 93 (d) 94

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A number consists of two digits. The digits in the ten's place is 3 times the digit in the unit's place. If 54 is subtracted from the number the digits are reversed. The number is

Options

(a) 39 (b) 92 (c) 93 (d) 94

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One student is asked to divide a half of a number by 6 and other half by 4 and then to add the two quantities. Instead of doing so the student divides the given number by 5. If the answer is 4 short of the correct answer then the number was

One student is asked to divide a half of a number by 6 and other half by 4 and then to add the two quantities. Instead of doing so the student divides the given number by 5. If the answer is 4 short of the correct answer then the number was

Options

(a) 320 (b) 400 (c) 480 (d) none of these

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One student is asked to divide a half of a number by 6 and other half by 4 and then to add the two quantities. Instead of doing so the student divides the given number by 5. If the answer is 4 short of the correct answer then the number was

Options

(a) 320 (b) 400 (c) 480 (d) none of these

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The solution of the set of equations 3x + 4y = 7, 4x - y = 3 is

The solution of the set of equations 3x + 4y = 7, 4x - y = 3 is

Options

(a) (1, -1) (b) (1, 1) (c) (2, 1) (d) (1, -2)

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The solution of the set of equations 3x + 4y = 7, 4x - y = 3 is

Options

(a) (1, -1) (b) (1, 1) (c) (2, 1) (d) (1, -2)

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The values of x and y satisfying the equations $\frac{x}{2} + \frac{y}{3} = 2, x + 2y = 8$ are given by the pair.

The values of x and y satisfying the equations $\frac{x}{2} + \frac{y}{3} = 2, x + 2y = 8$ are given by the pair.

Options

(a) (3, 2) (b) (-2, -3) (c) (2, 3) (d) none of these

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The values of x and y satisfying the equations $\frac{x}{2} + \frac{y}{3} = 2, x + 2y = 8$ are given by the pair.

Options

(a)
$$(3, 2)$$
 (b) $(-2, -3)$ (c) $(2, 3)$ (d) none of these

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$\frac{x}{p}+\frac{y}{q}=2, x+y=p+q$ are satisfied by the values given by the pair.

 $\frac{x}{p} + \frac{y}{q} = 2, x + y = p + q$ are satisfied by the values given by the pair.

Options

(a)
$$(x = p, y = q)$$
 (b) $(x = q, y = p)$ (c)
 $(x = 1, y = 1)$ (d) none of these

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$$\frac{x}{p} + \frac{y}{q} = 2, x + y = p + q$$
 are satisfied by the values given by the pair.

Options

(a)
$$(x = p, y = q)$$
 (b) $(x = q, y = p)$ (c)
 $(x = 1, y = 1)$ (d) none of these

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Question The solution for the pair of equations $\frac{1}{16x} + \frac{1}{15y} = \frac{9}{20}, \frac{1}{20x} - \frac{1}{27y} = \frac{4}{45}$ is given by

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The solution for the pair of equations $\frac{1}{16x} + \frac{1}{15y} = \frac{9}{20}, \frac{1}{20x} - \frac{1}{27y} = \frac{4}{45}$ is given by

Options

(a) (1/4, 1/3) (b) (1/3, 1/4) (c) (3,4) (d) (4,3)

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Question The solution for the pair of equations $\frac{1}{16x} + \frac{1}{15y} = \frac{9}{20}, \frac{1}{20x} - \frac{1}{27y} = \frac{4}{45}$ is given by

Options

(a) (1/4, 1/3) (b) (1/3, 1/4) (c) (3,4) (d) (4,3)

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Solve for x and y :
$$\frac{4}{x} - \frac{5}{y} = \frac{x + y}{xy} + \frac{3}{10}$$
 and $3xy = 10(y - x)$.

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Solve for x and y :
$$\frac{4}{x} - \frac{5}{y} = \frac{x + y}{xy} + \frac{3}{10}$$
 and $3xy = 10(y - x)$.

Options (a) (5, 2) (b) (-2, -5) (c) (2, -5) (d) (2, 5)

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Solve for x and y :
$$\frac{4}{x} - \frac{5}{y} = \frac{x + y}{xy} + \frac{3}{10}$$
 and $3xy = 10(y - x)$.

Options

(a)
$$(5, 2)$$
 (b) $(-2, -5)$ (c) $(2, -5)$ (d) $(2, 5)$

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The pair satisfying the equations $x + 5y = 36, \frac{x + y}{x - y} = \frac{5}{3}$ is given by

The pair satisfying the equations $x + 5y = 36, \frac{x + y}{x - y} = \frac{5}{3}$ is given by

Options

(a) (16, 4) (b) (4, 16) (c) (4, 8) (d) none of these

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The pair satisfying the equations $x + 5y = 36, \frac{x + y}{x - y} = \frac{5}{3}$ is given by

Options

(a) (16, 4) (b) (4, 16) (c) (4, 8) (d) none of these

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Solve for *x* and y : x - 3y = 0, x + 2y = 20.

Solve for x and
$$y : x - 3y = 0, x + 2y = 20$$
.

Options

(a) x=4, y=12 (b) x=12, y=4 (c) x=5, y=4 (d) none of these

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Solve for x and
$$y : x - 3y = 0, x + 2y = 20$$
.

Options

(a)
$$x=4$$
, $y=12$ (b) $x=12$, $y=4$ (c) $x=5$, $y=4$ (d) none of these

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The simultaneous equations

7x - 3y = 31, 9x - 5y = 41 have solutions given by

The simultaneous equations 7x - 3y = 31, 9x - 5y = 41 have solutions given by

Options

(a)(-4, -1) (b)(-1, 4) (c)(4, -1) (d)(3, 7)

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The simultaneous equations

7x - 3y = 31, 9x - 5y = 41 have solutions given by

Options

(a)
$$(-4, -1)$$
 (b) $(-1, 4)$ (c) $(4, -1)$ (d) $(3, 7)$

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1.5x + 2.4y = 1.8, 2.5(x + 1) = 7y have solutions as

1.5x + 2.4y = 1.8, 2.5(x + 1) = 7y have solutions as

Options

(a) (0.5, 0.4) (b) (0.4, 0.5) (c)
$$(\frac{1}{2}, \frac{2}{5})$$
 (d)
(2, 5)

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$$1.5x + 2.4y = 1.8, 2.5(x + 1) = 7y$$
 have solutions as

Options

(a) (0.5, 0.4) (b) (0.4, 0.5) (c)
$$(\frac{1}{2}, \frac{2}{5})$$
 (d)
(2, 5)

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The values of x and y satisfying the equations $\frac{3}{x+y} + \frac{2}{x-y} = 3$, $\frac{2}{x+y} + \frac{3}{x-y} = 3\frac{2}{3}$ are given by

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The values of x and y satisfying the equations

$$\frac{3}{x+y} + \frac{2}{x-y} = 3, \frac{2}{x+y} + \frac{3}{x-y} = 3\frac{2}{3}$$
 are given
by

Options

(a)
$$(1, 2)$$
 (b) $(-1, -2)$ (c) $(1, \frac{1}{2})$ (d) $(2, 1)$

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The values of x and y satisfying the equations
$$\frac{3}{x+y} + \frac{2}{x-y} = 3$$
, $\frac{2}{x+y} + \frac{3}{x-y} = 3\frac{2}{3}$ are given by

Options

(a)
$$(1, 2)$$
 (b) $(-1, -2)$ (c) $(1, \frac{1}{2})$ (d) $(2, 1)$

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1.5x + 3.6y = 2.1, 2.5(x + 1) = 6y

$$1.5x + 3.6y = 2.1, 2.5(x + 1) = 6y$$

Options (a) (0.2, 0.5) (b) (0.5, 0.2) (c) (2, 5) (d) (-2, -5)

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$$1.5x + 3.6y = 2.1, 2.5(x + 1) = 6y$$

Options

(a) (0.2, 0.5) (b) (0.5, 0.2) (c) (2, 5) (d) (-2, -5)

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Question
$$\frac{x}{5} + \frac{y}{6} + 1 = \frac{x}{6} + \frac{y}{5} = 28$$

Question $\frac{x}{5} + \frac{y}{6} + 1 = \frac{x}{6} + \frac{y}{5} = 28$ Options (a) (6, 9) (b) (9, 6) (c) (60, 90) (d) (90, 60)

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Question $\frac{x}{5} + \frac{y}{6} + 1 = \frac{x}{6} + \frac{y}{5} = 28$ Options (a) (6, 9) (b) (9, 6) (c) (60, 90) (d) (90, 60)

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Question $\frac{x}{4} = \frac{y}{3} = \frac{z}{2}$; 7x + 8y + 5z = 62

$$\frac{x}{4} = \frac{y}{3} = \frac{z}{2}$$
; 7x + 8y + 5z = 62

Options

(a) (4,3,2) (b) (2,3,4) (c) (3,4,2) (d) (4,2,3)

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$$\frac{x}{4} = \frac{y}{3} = \frac{z}{2}$$
; 7x + 8y + 5z = 62

Options

(a) (4,3,2) (b) (2,3,4) (c) (3,4,2) (d) (4,2,3)

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$$\frac{xy}{x+y} = 20, \frac{yz}{y+z} = 40, \frac{zx}{z+x} = 24$$

$$\frac{xy}{x+y} = 20, \frac{yz}{y+z} = 40, \frac{zx}{z+x} = 24$$

Options

(a) (120, 60, 30) (b) (60, 30, 120) (c) (30, 120, 60) (d) (30, 60, 120)

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$$\frac{xy}{x+y} = 20, \frac{yz}{y+z} = 40, \frac{zx}{z+x} = 24$$

Options

(a) (120, 60, 30) (b) (60, 30, 120) (c) (30, 120, 60) (d) (30, 60, 120)

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2x + 3y + 4z = 0, x + 2y - 5z = 0, 10x + 16y - 6z = 0

$$2x+3y+4z = 0, x+2y-5z = 0, 10x+16y-6z = 0$$

Options (a) (0,0,0) (b) (1, -1,1) (c) (3, 2, -1) (d) (1, 0,2)

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$$2x+3y+4z = 0, x+2y-5z = 0, 10x+16y-6z = 0$$

Options

(a) (0,0,0) (b) (1, -1,1) (c) (3, 2, -1) (d) (1, 0,2)

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$$\frac{1}{3}(x + y) + 2z = 21, 3x - \frac{1}{2}(y + z) = 65, x + \frac{1}{2}(x + y - z) = 38$$

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$$\frac{1}{3}(x + y) + 2z = 21, 3x - \frac{1}{2}(y + z) = 65, x + \frac{1}{2}(x + y - z) = 38$$

Options

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$$\frac{1}{3}(x + y) + 2z = 21, 3x - \frac{1}{2}(y + z) = 65, x + \frac{1}{2}(x + y - z) = 38$$

Options

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Question $\frac{4}{x} - \frac{5}{y} = \frac{x + y}{xy} + \frac{3}{10}, \ 3xy = 10(y - x)$

Question $\frac{4}{x} - \frac{5}{y} = \frac{x + y}{xy} + \frac{3}{10}, \ 3xy = 10(y - x)$

Options

(a) (2, 5) (b) (5, 2) (c) (2, 7) (d) (3, 4)

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Question $\frac{4}{x} - \frac{5}{y} = \frac{x + y}{xy} + \frac{3}{10}, \ 3xy = 10(y - x)$

Options

(a) (2, 5) (b) (5, 2) (c) (2, 7) (d) (3, 4)

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Question $\frac{x}{0.01} + \frac{y + 0.03}{0.05} = \frac{y}{0.02} + \frac{x + 0.03}{0.04} = 2$

$$\frac{x}{0.01} + \frac{y + 0.03}{0.05} = \frac{y}{0.02} + \frac{x + 0.03}{0.04} = 2$$

Options

(a) (1, 2) (b) (0.1, 0.2) (c) (0.01, 0.02) (d) (0.02, 0.01)

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$$\frac{x}{0.01} + \frac{y + 0.03}{0.05} = \frac{y}{0.02} + \frac{x + 0.03}{0.04} = 2$$

Options

(a) (1, 2) (b) (0.1, 0.2) (c) (0.01, 0.02) (d) (0.02, 0.01)

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$$\frac{xy}{y-x} = 110, \frac{yz}{z-y} = 132, \frac{zx}{z+x} = \frac{60}{11}$$

$$\frac{xy}{y-x} = 110, \frac{yz}{z-y} = 132, \frac{zx}{z+x} = \frac{60}{11}$$

Options

(a) (12, 11, 10) (b) (10, 11, 12) (c) (11, 10, 12) (d) (12, 10, 11)

J. Maria Joseph PhD

Department of Mathematics

$$\frac{xy}{y-x} = 110, \frac{yz}{z-y} = 132, \frac{zx}{z+x} = \frac{60}{11}$$

Options

(a)
$$(12, 11, 10)$$
 (b) $(10, 11, 12)$ (c) $(11, 10, 12)$ (d) $(12, 10, 11)$

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Department of Mathematics

$$3x - 4y + 70z = 0, 2x + 3y - 10z = 0, x + 2y + 3z = 13$$

$$3x - 4y + 70z = 0, 2x + 3y - 10z = 0, x + 2y + 3z = 13$$

Options (a) (1,3,7) (b) (1,7,3) (c) (2,4,3) (d) (-10,10,1)

J. Maria Joseph PhD

Department of Mathematics

$$3x - 4y + 70z = 0, 2x + 3y - 10z = 0, x + 2y + 3z = 13$$

Options

(a) (1,3,7) (b) (1,7,3) (c) (2,4,3) (d) (-10,10,1)

J. Maria Joseph PhD

Department of Mathematics

Monthly incomes of two persons are in the ratio 4 : 5 and their monthly expenses are in the ratio 7: 9. If each saves Rs.50 per month find their monthly incomes.

Monthly incomes of two persons are in the ratio 4 : 5 and their monthly expenses are in the ratio 7: 9. If each saves Rs.50 per month find their monthly incomes.

Options

(a) (500, 400) (b) (400, 500) (c) (300, 600) (d) (350, 550)

J. Maria Joseph PhD

Monthly incomes of two persons are in the ratio 4 : 5 and their monthly expenses are in the ratio 7: 9. If each saves Rs.50 per month find their monthly incomes.

Options

(a) (500, 400) (b) (400, 500) (c) (300, 600) (d) (350, 550)

J. Maria Joseph PhD

Find the fraction which is equal to 1/2 when both its numerator and denominator are increased by 2. It is equal to 3/4 when both are increased by 12.

Find the fraction which is equal to 1/2 when both its numerator and denominator are increased by 2. It is equal to 3/4 when both are increased by 12.

Options

(a) 3/8 (b) 5/8 (c) 2/8 (d) 2/3

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Find the fraction which is equal to 1/2 when both its numerator and denominator are increased by 2. It is equal to 3/4 when both are increased by 12.

Options

J. Maria Joseph PhD

The age of a person is twice the sum of the ages of his two sons and five years ago his age was thrice the sum of their ages. Find his present age.

The age of a person is twice the sum of the ages of his two sons and five years ago his age was thrice the sum of their ages. Find his present age.

Options

(a) 60 years (b) 52 years (c) 51 years (d) 50 years

J. Maria Joseph PhD

The age of a person is twice the sum of the ages of his two sons and five years ago his age was thrice the sum of their ages. Find his present age.

Options

(a) 60 years (b) 52 years (c) 51 years (d) 50 years

J. Maria Joseph PhD

A number between 10 and 100 is five times the sum of its digits. If 9 be added to it the digits are reversed find the number.

A number between 10 and 100 is five times the sum of its digits. If 9 be added to it the digits are reversed find the number.

Options (a) 54 (b) 53 (c) 45 (d) 55

J. Maria Joseph PhD

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A number between 10 and 100 is five times the sum of its digits. If 9 be added to it the digits are reversed find the number.

Options

(a) 54 (b) 53 (c) 45 (d) 55

J. Maria Joseph PhD

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The wages of 8 men and 6 boys amount to Rs.33. If 4 men earn Rs.4.50 more than 5 boys determine the wages of each man and boy.

The wages of 8 men and 6 boys amount to Rs.33. If 4 men earn Rs.4.50 more than 5 boys determine the wages of each man and boy.

Options

(a) (Rs. 1.50, Rs. 3) (b) (Rs. 3, Rs. 1.50) (c) (Rs. 2.50, Rs. 2) (d) (Rs. 2, Rs. 2.50)

J. Maria Joseph PhD

Department of Mathematics

The wages of 8 men and 6 boys amount to Rs.33. If 4 men earn Rs.4.50 more than 5 boys determine the wages of each man and boy.

Options

(a) (Rs. 1.50, Rs. 3) (b) (Rs. 3, Rs. 1.50) (c) (Rs. 2.50, Rs. 2) (d) (Rs. 2, Rs. 2.50)

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A number consisting of two digits is four times the sum of its digits and if 27 be added to it the digits are reversed. The number is :

A number consisting of two digits is four times the sum of its digits and if 27 be added to it the digits are reversed. The number is :

Options (a) 63 (b) 35 (c) 36 (d) 60

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A number consisting of two digits is four times the sum of its digits and if 27 be added to it the digits are reversed. The number is :

Options

(a) 63 (b) 35 (c) 36 (d) 60

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Of two numbers, 1/5 th of the greater is equal to 1/3 rd of the smaller and their sum is 16. The numbers are:

Of two numbers, 1/5 th of the greater is equal to 1/3 rd of the smaller and their sum is 16. The numbers are:

Options

(a) (6, 10) (b) (9, 7) (c) (12, 4) (d) (11, 5)

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Of two numbers, 1/5 th of the greater is equal to 1/3 rd of the smaller and their sum is 16. The numbers are:

Options

(a) (6, 10) (b) (9, 7) (c) (12, 4) (d) (11, 5)

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y is older than x by 7 years 15 years back x's age was 3/4 of y's age. Their present ages are:

y is older than x by 7 years 15 years back x's age was 3/4 of y's age. Their present ages are:

Options

(a)
$$(x=36, y=43)$$
 (b) $(x=50, y=43)$ (c) $(x=43, y=50)$ (d) $(x=40, y=47)$

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Department of Mathematics

y is older than x by 7 years 15 years back x's age was 3/4 of y's age. Their present ages are:

Options

(a)
$$(x=36, y=43)$$
 (b) $(x=50, y=43)$ (c) $(x=43, y=50)$ (d) $(x=40, y=47)$

J. Maria Joseph PhD

The sum of the digits in a three digit number is 12. If the digits are reversed the number is increased by 495 but reversing only of the ten's and unit digits increases the number by 36. The number is

The sum of the digits in a three digit number is 12. If the digits are reversed the number is increased by 495 but reversing only of the ten's and unit digits increases the number by 36. The number is

Options (a) 327 (b) 372 (c) 237 (d) 273

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The sum of the digits in a three digit number is 12. If the digits are reversed the number is increased by 495 but reversing only of the ten's and unit digits increases the number by 36. The number is

Options

(a) 327 (b) 372 (c) 237 (d) 273

J. Maria Joseph PhD

Two numbers are such that twice the greater number exceeds twice the smaller one by 18 and $1/3^{rd}$ of the smaller and $1/5^{th}$ of the greater number are together 21. The numbers are:

Two numbers are such that twice the greater number exceeds twice the smaller one by 18 and $1/3^{\rm rd}$ of the smaller and $1/5^{\rm th}$ of the greater number are together 21. The numbers are:

Options

(a) (36, 45) (b) (45, 36) (c) (50, 41) (d) (55, 46)

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Two numbers are such that twice the greater number exceeds twice the smaller one by 18 and $1/3^{\rm rd}$ of the smaller and $1/5^{\rm th}$ of the greater number are together 21. The numbers are:

Options

(a) (36, 45) (b) (45, 36) (c) (50, 41) (d) (55, 46)

J. Maria Joseph PhD

Department of Mathematics

The demand and supply equations for a certain commodity are 4q + 7p = 17 and $p = \frac{q}{3} + \frac{7}{4}$. respectively where p is the market price and q is the quantity then the equilibrium price and quantity are:

The demand and supply equations for a certain commodity are 4q + 7p = 17 and $p = \frac{q}{3} + \frac{7}{4}$. respectively where p is the market price and q is the quantity then the equilibrium price and quantity are:

Options 3 1 3 (a) $2\overline{4}$ (b) $3\overline{2}$ (c) $5\overline{5}$ (d) None of these

J. Maria Joseph PhD

The demand and supply equations for a certain commodity are 4q + 7p = 17 and $p = \frac{q}{3} + \frac{7}{4}$. respectively where p is the market price and q is the quantity then the equilibrium price and quantity are:

Options			
3	1	3	
(a) 2 4	(b) 3 ²	(c) 55	(d) None of these

J. Maria Joseph PhD

If the roots of the equation $2x^2 + 8x - m^3 = 0$ are equal then value of m is

If the roots of the equation $2x^2 + 8x - m^3 = 0$ are equal then value of m is

Options

(a) -3 (b) -1 (c) 1 (d) -2

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If the roots of the equation $2x^2 + 8x - m^3 = 0$ are equal then value of m is

Options

(a)
$$-3$$
 (b) -1 (c) 1 (d) -2

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If $2^{2x+3} - 3^2 \cdot 2^x + 1 = 0$ then values of x are

If $2^{2x+3} - 3^2 \cdot 2^x + 1 = 0$ then values of x are

Options (a) 0,1 (b) 1,2 (c) 0,3 (d) 0,-3

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Department of Mathematics

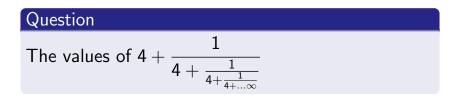
If
$$2^{2x+3} - 3^2 \cdot 2^x + 1 = 0$$
 then values of x are

Options

(a)
$$0,1$$
 (b) $1,2$ (c) $0,3$ (d) $0,-3$

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Department of Mathematics



The values of
$$4 + rac{1}{4 + rac{1}{4 + rac{1}{4 + \dots \infty}}}$$

Options

(a) $1\pm\sqrt{2}$ (b) $2+\sqrt{5}$ (c) $2\pm\sqrt{5}$ (d) none of these

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Question The values of $4 + \frac{1}{4 + \frac{1}{4 + \frac{1}{4 + \dots \infty}}}$

Options

(a) $1\pm\sqrt{2}$ (b) $2+\sqrt{5}$ (c) $2\pm\sqrt{5}$ (d) none of these

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If $\alpha\beta$ be the roots of the equation $2x^2 - 4x - 3 = 0$ the value of $\alpha^2 + \beta^2$ is

If $\alpha\beta$ be the roots of the equation $2x^2 - 4x - 3 = 0$ the value of $\alpha^2 + \beta^2$ is

Options

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If $\alpha\beta$ be the roots of the equation $2x^2 - 4x - 3 = 0$ the value of $\alpha^2 + \beta^2$ is

Options

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If the sum of the roots of the quadratic equation $ax^2 + bx + c = 0$ is equal to the sum of the squares of their reciprocals then $\frac{a^2}{ac} + \frac{bc}{a^2}$ is equal to

If the sum of the roots of the quadratic equation $ax^2 + bx + c = 0$ is equal to the sum of the squares of their reciprocals then $\frac{a^2}{ac} + \frac{bc}{a^2}$ is equal to

Options (a) 2 (b)-2 (c) 1 (d)-1

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If the sum of the roots of the quadratic equation $ax^2 + bx + c = 0$ is equal to the sum of the squares of their reciprocals then $\frac{a^2}{ac} + \frac{bc}{a^2}$ is equal to

Options

(a) 2 (b)
$$-2$$
 (c) 1 (d) -1

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The equation $x^2 - (p+4)x + 2p + 5 = 0$ has equal roots the values of p will be

The equation $x^2 - (p+4)x + 2p + 5 = 0$ has equal roots the values of p will be

Options (a) ± 1 (b) 2 (c) ± 2 (d) -2

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The equation $x^2 - (p+4)x + 2p + 5 = 0$ has equal roots the values of p will be

Options

(a)
$$\pm 1$$
 (b) 2 (c) ± 2 (d) -2

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The roots of the equation $x^2 + (2p - 1)x + p^2 = 0$ are real if

The roots of the equation $x^2 + (2p - 1)x + p^2 = 0$ are real if

Options

(a) p > 1 (b) p < 4 (c) p > 1/4 (d) p < 1/4

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The roots of the equation $x^2 + (2p - 1)x + p^2 = 0$ are real if

Options

(a) $\mathrm{p}>1$ (b) $\mathrm{p}<4$ (c) $\mathrm{p}>1/4$ (d) $\mathrm{p}<1/4$

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If x = m is one of the solutions of the equation $2x^2 + 5x - m = 0$ the possible values of m are

If x = m is one of the solutions of the equation $2x^2 + 5x - m = 0$ the possible values of m are

Options

(a) (0,2) (b) (0, -2) (c) (0,1) (d) (1, -1)

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If x = m is one of the solutions of the equation $2x^2 + 5x - m = 0$ the possible values of m are

Options

(a) (0,2) (b) (0, -2) (c) (0,1) (d) (1, -1)

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If p and q are the roots of $x^2 + 2x + 1 = 0$ then the values of $p^3 + q^3$ becomes

If p and q are the roots of $x^2 + 2x + 1 = 0$ then the values of $p^3 + q^3$ becomes

Options

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If p and q are the roots of $x^2 + 2x + 1 = 0$ then the values of $p^3 + q^3$ becomes

Options

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If L + M + N = 0 and L, M, N are rationals the roots of the equation $(M + N - L)x^2 + (N + L - M)x + (L + M - N) = 0$ are

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If L + M + N = 0 and L, M, N are rationals the roots of the equation $(M + N - L)x^2 + (N + L - M)x + (L + M - N) = 0$ are

Options

(a) real and irrational (b) real and rational (c) imaginary and equal (d) real and equal

J. Maria Joseph PhD

If L + M + N = 0 and L, M, N are rationals the roots of the equation $(M + N - L)x^2 + (N + L - M)x + (L + M - N) = 0$ are

Options

(a) real and irrational (b) real and rational (c) imaginary and equal (d) real and equal

J. Maria Joseph PhD

Question If α and β are the roots of $x^2 = x + 1$ then value of $\frac{\alpha^2}{\beta} - \frac{\beta^2}{\alpha}$ is

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If α and β are the roots of $x^2=x+1$ then value of $\frac{\alpha^2}{\beta}-\frac{\beta^2}{\alpha}$ is

Options

(a) $2\sqrt{5}$ (b) $\sqrt{5}$ (c) $3\sqrt{5}$ (d) $-2\sqrt{5}$

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Department of Mathematics

If α and β are the roots of $x^2=x+1$ then value of $\frac{\alpha^2}{\beta}-\frac{\beta^2}{\alpha}$ is

Options

(a)
$$2\sqrt{5}$$
 (b) $\sqrt{5}$ (c) $3\sqrt{5}$ (d) $-2\sqrt{5}$

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If
$$p \neq q$$
 and $p^2 = 5p - 3$ and $q^2 = 5q - 3$ the equation having roots as $\frac{p}{q}$ and $\frac{q}{p}$ is

If
$$p \neq q$$
 and $p^2 = 5p - 3$ and $q^2 = 5q - 3$ the equation having roots as $\frac{p}{q}$ and $\frac{q}{p}$ is

Options

(a)
$$x^2 - 19x + 3 = 0$$
 (b) $3x^2 - 19x - 3 = 0$
(c) $3x^2 - 19x + 3 = 0$ (d) $3x^2 + 19x + 3 = 0$

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If
$$p \neq q$$
 and $p^2 = 5p - 3$ and $q^2 = 5q - 3$ the equation having roots as $\frac{p}{q}$ and $\frac{q}{p}$ is

Options

(a)
$$x^2 - 19x + 3 = 0$$
 (b) $3x^2 - 19x - 3 = 0$
(c) $3x^2 - 19x + 3 = 0$ (d) $3x^2 + 19x + 3 = 0$

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If one root of $5^2x + 13x + p = 0$ be reciprocal of the other then the value of p is

If one root of $5^2x + 13x + p = 0$ be reciprocal of the other then the value of p is

Options

(a) -5 (b) 5 (c)
$$1/5$$
 (d) $-1/5$

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Department of Mathematics

If one root of $5^2x + 13x + p = 0$ be reciprocal of the other then the value of p is

Options

(a)-5 (b) 5 (c)
$$1/5$$
 (d)- $1/5$

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A solution of the quadratic equation $(a+b-2c)x^2 + (2a-b-c)x + (c+a-2b) = 0$ is

A solution of the quadratic equation $(a+b-2c)x^2+(2a-b-c)x+(c+a-2b)=0$ is

Options

(a)
$$x = 1$$
 (b) $x = -1$ (c) $x = 2$ (d) $x = -2$

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A solution of the quadratic equation $(a+b-2c)x^2+(2a-b-c)x+(c+a-2b)=0$ is

Options (a) x = 1 (b) x = -1 (c) x = 2 (d) x = -2

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If the root of the equation $x^2 - 8x + m = 0$ exceeds the other by 4 then the value of m is

If the root of the equation $x^2 - 8x + m = 0$ exceeds the other by 4 then the value of m is

Options

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If the root of the equation $x^2 - 8x + m = 0$ exceeds the other by 4 then the value of m is

Options

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The values of x in the equation $7(x+2p)^2 + 5p^2 = 35xp + 117p^2$ are

The values of x in the equation $7(x+2p)^2 + 5p^2 = 35xp + 117p^2$ are

Options

(a)
$$(4p, -3p)$$
 (b) $(4p, 3p)$ (c) $(Ap, 3p)$
(d) $(-4p, -3p)$

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The values of x in the equation $7(x+2p)^2 + 5p^2 = 35xp + 117p^2$ are

Options

(a)
$$(4p, -3p)$$
 (b) $(4p, 3p)$ (c) $(Ap, 3p)$
(d) $(-4p, -3p)$

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The solutions of the equation $\frac{6x}{x+1} + \frac{6(x+1)}{x} = 13 \text{ are}$

The solutions of the equation $\frac{6x}{x+1} + \frac{6(x+1)}{x} = 13 \text{ are}$

Options

(a)
$$(2, 3)$$
 (b) $(3, -2)$ (c) $(-2, -3)$
(d) $(2, -3)$

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Department of Mathematics

The solutions of the equation $\frac{6x}{x+1} + \frac{6(x+1)}{x} = 13 \text{ are}$

Options

(a)
$$(2, 3)$$
 (b) $(3, -2)$ (c) $(-2, -3)$
(d) $(2, -3)$

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The satisfying values of x for the equation $\frac{1}{x+p+q} = \frac{1}{x} + \frac{1}{p} + \frac{1}{q}$

The satisfying values of x for the equation $\frac{1}{x+p+q} = \frac{1}{x} + \frac{1}{p} + \frac{1}{q}$

Options

$$\begin{array}{ll} (a) (p, q) & (b) (-p, -q) & (c) (p, -p) \\ (d) (-p, q) \end{array}$$

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The satisfying values of x for the equation

$$\frac{1}{x+p+q} = \frac{1}{x} + \frac{1}{p} + \frac{1}{q}$$

Options

(a)
$$(p, q)$$
 (b) $(-p, -q)$ (c) $(p, -p)$
(d) $(-p, q)$

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The values of x for the equation $x^2 + 9x + 18 = 6 - 4x$ are

The values of x for the equation $x^2 + 9x + 18 = 6 - 4x$ are

Options

(a) (1, 12) (b) (-1, -12) (c) (1, -12) (d) (-1, 12)

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The values of x for the equation $x^2 + 9x + 18 = 6 - 4x$ are

Options

(a)
$$(1, 12)$$
 (b) $(-1, -12)$ (c) $(1, -12)$ (d) $(-1, 12)$

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The values of x satisfying the equation $\sqrt{(2x^2+5x-2)} - \sqrt{(2x^2+5x-9)} = 1$ are

The values of x satisfying the equation $\sqrt{(2x^2+5x-2)} - \sqrt{(2x^2+5x-9)} = 1$ are

Options

(a) (2, -9/2) (b) (4, -9) (c) (2, 9/2) (d) (-2,9/2)

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The values of x satisfying the equation $\sqrt{(2x^2+5x-2)} - \sqrt{(2x^2+5x-9)} = 1$ are

Options

(a)
$$(2, -9/2)$$
 (b) $(4, -9)$ (c) $(2, 9/2)$ (d) $(-2, 9/2)$

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The solution of the equation $3x^2 - 17x + 24 = 0$ are

The solution of the equation $3x^2 - 17x + 24 = 0$ are

Options

(a) (2, 3) (b) $(2, 3\frac{2}{3})$ (c) $(3, 2\frac{2}{3})$ (d) $(3, \frac{2}{3})$

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The solution of the equation $3x^2 - 17x + 24 = 0$ are

Options

(a) (2, 3) (b) $(2, 3\frac{2}{3})$ (c) $(3, 2\frac{2}{3})$ (d) $(3, \frac{2}{3})$

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The equation
$$\frac{3(3x^2 + 15)}{6} + 2x^2 + 9 = \frac{2x^2 + 96}{7} + 6$$
 has got the solution as

The equation
$$\frac{3(3x^2 + 15)}{6} + 2x^2 + 9 = \frac{2x^2 + 96}{7} + 6$$

has got the solution as

Options

(a)
$$(1, 1)$$
 (b) $(1/2, -1)$ (c) $(1, -1)$
(d) $(2, -1)$

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The equation
$$\frac{3(3x^2 + 15)}{6} + 2x^2 + 9 = \frac{2x^2 + 96}{7} + 6$$

has got the solution as

Options

(a)
$$(1, 1)$$
 (b) $(1/2, -1)$ (c) $(1, -1)$
(d) $(2, -1)$

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The equation
$$(\frac{l-m}{2})x^2 - (\frac{l+m}{2})x + m = 0$$
 has got two values of x to satisfy the equation given as

The equation
$$(\frac{l-m}{2})x^2 - (\frac{l+m}{2})x + m = 0$$
 has got two values of x to satisfy the equation given as

Options

(a)
$$(1, \frac{2m}{l-m})$$
 (b) $(1, \frac{m}{l-m})$ (c) $(1, \frac{2l}{l-m})$
(d) $(1, \frac{1}{l-m})$

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The equation
$$(\frac{l-m}{2})x^2 - (\frac{l+m}{2})x + m = 0$$
 has got two values of x to satisfy the equation given as

Options

(a)
$$(1, \frac{2m}{l-m})$$
 (b) $(1, \frac{m}{l-m})$ (c) $(1, \frac{2l}{l-m})$
(d) $(1, \frac{1}{l-m})$

J. Maria Joseph PhD

The solution of the cubic equation

 $x^{3} - 6x^{2} + 11x - 6 = 0$ is given by the triplet :

The solution of the cubic equation $x^3 - 6x^2 + 11x - 6 = 0$ is given by the triplet :

Options

(a)
$$(-1, 1-2)$$
 (b) $(1, 2, 3)$ (c) $(-2, 2, 3)$
(d) $(0, 4, -5)$

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The solution of the cubic equation $x^3 - 6x^2 + 11x - 6 = 0$ is given by the triplet :

Options

(a)
$$(-1, 1-2)$$
 (b) $(1, 2, 3)$ (c) $(-2, 2, 3)$
(d) $(0, 4, -5)$

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The cubic equation $x^3 + 2x^2 - x - 2 = 0$ has 3 roots namely.

The cubic equation $x^3 + 2x^2 - x - 2 = 0$ has 3 roots namely.

Options

(a) (1, -1, 2) (b) (-1, 1, -2) (c) (-1, 2, -2)(d) (1, 2, 2)

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The cubic equation $x^3 + 2x^2 - x - 2 = 0$ has 3 roots namely.

Options

(a)
$$(1, -1, 2)$$
 (b) $(-1, 1, -2)$ (c) $(-1, 2, -2)$ (d) $(1, 2, 2)$

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x, x - 4, x + 5 are the factors of the lefthand side of the equation.

x, x - 4, x + 5 are the factors of the lefthand side of the equation.

Options

(a)
$$x^{3} + 2x^{2} - x - 2 = 0$$
 (b) $x^{3} + x^{2} - 20x = 0$
(c) $x^{3} - 3x^{2} - 4x + 12 = 0$ (d)
 $x^{3} - 6x^{2} + 11x - 6 = 0$

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x, x - 4, x + 5 are the factors of the lefthand side of the equation.

Options

(a)
$$x^3 + 2x^2 - x - 2 = 0$$
 (b) $x^3 + x^2 - 20x = 0$
(c) $x^3 - 3x^2 - 4x + 12 = 0$ (d)
 $x^3 - 6x^2 + 11x - 6 = 0$

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The equation $3x^3 + 5x^2 = 3x + 5$ has got 3 roots and hence the factors of the left hand side of the equation $3x^3 + 5x^2 - 3x - 5 = 0$ are

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Options

(a)
$$x - 1$$
, $x - 2$, $x - 5/3$ (b) $x - 1$, $x + 1$, $3x + 5$
(c) $x + 1$, $x - 1$, $3x - 5$ (d) $x - 1$, $x + 1$, $x - 2$

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The roots of the equation $x^3 + 7x^2 - 21x - 27 = 0$

are

The roots of the equation $x^3 + 7x^2 - 21x - 27 = 0$ are

Options

(a)
$$(-3, -9, -1)$$
 (b) $(3, -9, -1)$ (c)
(3, 9, 1) (d) $(-3, 9, 1)$

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The roots of the equation $x^3 + 7x^2 - 21x - 27 = 0$ are

Options (a) (-3, -9, -1) (b) (3, -9, -1) (c) (3, 9, 1) (d) (-3, 9, 1)

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The roots of
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The satisfying value of $x^3 + x^2 - 20x = 0$ are

The satisfying value of $x^3 + x^2 - 20x = 0$ are

Options (a) (1, 4, -5) (b) (2, 4, -5) (c) (0, -4, 5)(d) (0, 4, -5)

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The satisfying value of
$$x^3 + x^2 - 20x = 0$$
 are

Options

(a)
$$(1, 4, -5)$$
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(d) $(0, 4, -5)$

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The roots of the cubic equation $x^3 + 7x^2 - 21x - 27 = 0$ are

The roots of the cubic equation $x^3 + 7x^2 - 21x - 27 = 0$ are

Options

(a)
$$(-3, -9, -1)$$
 (b) $(3, -9, -1)$ (c)
(3, 9, 1) (d) $(-3, 9, 1)$

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The roots of the cubic equation $x^3 + 7x^2 - 21x - 27 = 0$ are

Options

(a)
$$(-3, -9, -1)$$
 (b) $(3, -9, -1)$ (c)
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Question If $4x^3 + 8x^2 - x - 2 = 0$ then value of (2x + 3) is given by

If
$$4x^3 + 8x^2 - x - 2 = 0$$
 then value of $(2x + 3)$ is given by

Options

(a) 4, -1, 2 (b) A, 2, 1 (c) 2, -4, -1 (d) none of these

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If
$$4x^3 + 8x^2 - x - 2 = 0$$
 then value of $(2x + 3)$ is given by

Options

(a) 4, -1, 2 (b) A, 2, 1 (c) 2, -4, -1 (d) none of these

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The rational root of the equation $2x^3 - x^2 - 4x + 2 = 0$ is

The rational root of the equation $2x^3 - x^2 - 4x + 2 = 0$ is

Options

(a)
$$\frac{1}{2}$$
 (b) $-\frac{1}{2}$ (c) 2 (d) -2

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The rational root of the equation $2x^3 - x^2 - 4x + 2 = 0$ is

Options

1

(a)
$$\frac{1}{2}$$
 (b) $-\frac{1}{2}$ (c) 2 (d) -2

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Thank you

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