Banking Daily Quiz Blog - February 24

ENTRI

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Directions: Solve the given quadratic equations and mark the correct option based on your answer

1. **I.** $x^2 + 9x + 20 = 0$

   II. $8y^2 - 15y + 7 = 0$

A x > y

B x ≥ y

C **x < y**

D x ≤ y

E x = y or no relation can be established between x and y

Solution

I. $x^2 + 9x + 20 = 0$

$x^2 + 5x + 4x + 20 = 0$

$x(x + 5) + 4(x + 5) = 0$

$(x + 5)\,(x + 4) = 0$

$x = -4, -5$

II. $8y^2 - 15y + 7 = 0$

$8y^2 - 8y - 7y + 7 = 0$

$8y(y - 1) - 7(y - 1) = 0$

$(y - 1)(8y - 7) = 0$

$y = 1, \frac{7}{8}$

So, $x < y$.

Directions: Solve the given quadratic equations and mark the correct option based on your answer

2. **I.** $x^2 - 11x + 30 = 0$

   II. $y^2 + 12y + 36 = 0$

A. **x > y**

B. x ≥ y

C. x < y

D. x ≤ y

E. x = y or no relation can be established between x and y

Solution

I. $x^2 - 11x + 30 = 0$

$x^2 - 6x - 5x + 30 = 0$

$x(x - 6) - 5(x - 6) = 0$

$(x - 6)(x - 5) = 0$

$x = 5, 6$

II. $y^2 + 12y + 36 = 0$

$y^2 + 6y + 6y + 36 = 0$

$y(y + 6) + 6(y + 6) = 0$

$(y + 6)(y + 6) = 0$

$y = -6$

So, $x > y$

Directions: Solve the given quadratic equations and mark the correct option based on your answer

3. **I.** $x^2 + 13x + 40 = 0$

   II. $y^2 + 7y + 10 = 0$

A. x > y

B. x ≥ y

C $x < y$

D **$x \leq y$**

E $x = y$ or no relation can be established between x and y

Solution

I. $x^2 + 13x + 40 = 0$

$x^2 + 8x + 5x + 40 = 0$

$x(x + 8) + 5(x + 8) = 0$

$(x + 8)(x + 5) = 0$

$x = -8, -5$

II. $y^2 + 7y + 10 = 0$

\(y^2 + 5y + 2y + 10 = 0

$y(y + 5) + 2(y + 5) = 0$

$(y + 5)(y + 2) = 0$

$y = -2, -5$

So, $x \leq y$

Directions: Solve the given quadratic equations and mark the correct option based on your answer

4. **I.** $x^2 - 20x + 91 = 0$

II. $y^2 + 16y + 63 = 0$

A **x > y**

B x ≥ y

C x < y

D x ≤ y

E x = y or no relation can be established between x and y

Solution

I. $x^2 - 20x + 91 = 0$

$x^2 - 13x - 7x + 91 = 0$

$x(x - 13) - 7(x - 13) = 0$

$(x - 13)(x - 7) = 0$

$x = 7, 13$

II. $y^2 + 16y + 63 = 0$

$y^2 + 9y + 7y + 63 = 0$

$y(y + 9) + 7(y + 9) = 0$

$(y + 9)(y + 7) = 0$

$y = -7, -9$

So, $x > y$

Directions: Solve the given quadratic equations and mark the correct option based on your answer

5. **I.** $x^2 - x - 12 = 0$

   II. $y^2 + 5y + 6 = 0$

A. x > y

B. x ≥ y

C. x < y

D. x ≤ y

E. x = y or no relation can be established between x and y

Solution

I. $x^2 - x - 12 = 0$

$x^2 - 4x + 3x - 12 = 0$

$x(x-4)+3(x-4)=0$

$(x-4)(x+3)=0$

$x=4,-3$

II. $y^2+5y+6=0$

$y^2+3y+2y+6=0$

$y(y+3)+2(y+3)=0$

$(y+3)(y+2)=0$

$y=-2,-3$

So, *no relation*

Directions : Find the value of (?) in the following number series

6. **1.5, 3, 12, 72, 576, ?**

A 5480

B 5620

C 5580

D 5340

E 5760

Solution

Missing number = 5760

Pattern of series –

$1.5 \times 2 = 3$

$3 \times 4 = 12$

$12 \times 6 = 72$

$72 \times 8 = 576$

$576 \times 10 = 5760$

Directions: Find the value of (?) in the following number series.

7. **80, 66, 85, 61, 90, ?**

A 50

B **56**

C 63

D 64

E 60

E 60

Solution

Missing number = 56

Pattern of series –

80 − 14 = 66

66 + 19 = 85

85 − 24 = 61

61 + 29 = 90

90 − 34 = 56

Directions : Find the value of (?) in the following number series.

8. **163, ?, 43, 23, 13, 8**

A 92

B **83**

C 78

D 54

E 69

Solution

Missing number = 83

Pattern of series –

163 − 80 = 83

83 − 40 = 43

43 − 20 = 23

23 − 10 = 13

13 − 5 = 8

Directions : Find the value of (?) in the following number series.

9. **150, 152, 157, 167, 184, ?**

A 229

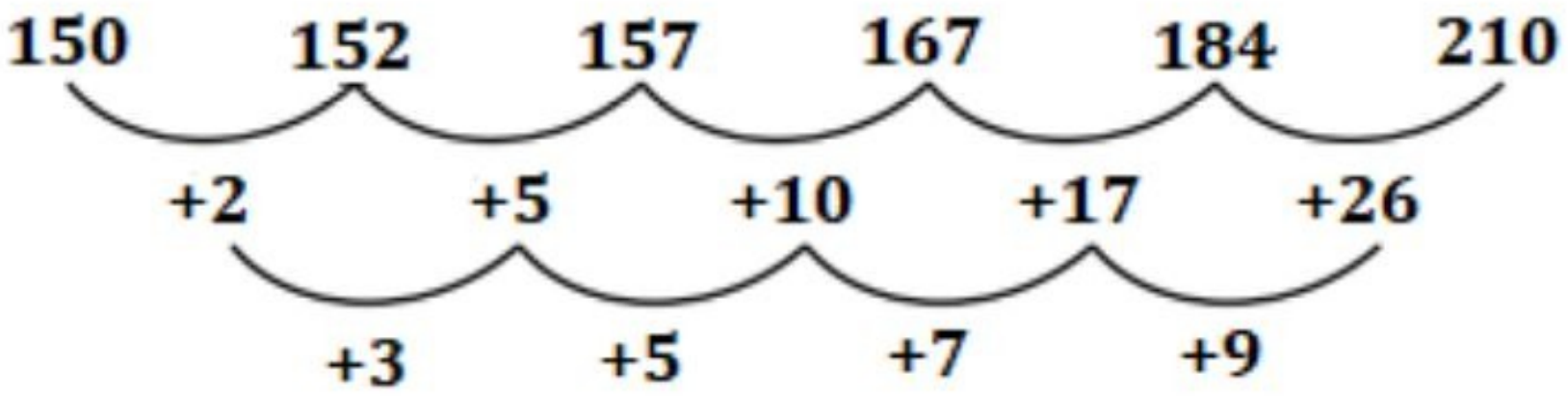
B 245

C 232

D **210**

E 206

Solution



Directions : Find the value of (?) in the following number series.

10. **3.5, 2.5, 3, 6, 20, ?**

A **95**

B 80

C 65

D 75

E 90

Solution

Missing number = 95

Pattern of series –

$$3.5 \times 1 - 1 = 2.5$$

$$2.5 \times 2 - 2 = 3$$

$$3 \times 3 - 3 = 6$$

$$6 \times 4 - 4 = 20$$

$$20 \times 5 - 5 = 95$$