Course: RBI Assistant Mains & IBPS Main

Subject: Wrong Series & Quadratic Equation

Time:12 Minutes
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Direction (1 – 7): निम्नलिखित संख्या श्रृंखला में गलत पद ज्ञात कीजिए:

Q1. 5, 86, 174, 276, 399, 558, 736
(a) 276
(b) 736
(c) 558
(d) 86
(e) 399
L1Difficulty 3
Qtags Wrong Series
QCreator AYUSH PANDEY

Q2. 9, 4.5, 6.5, 14, 57, 457, 7313
(a) 4.5
(b) 57
(c) 457
(d) 9
(e) 7313
L1Difficulty 3
Qtags Wrong Series
QCreator AYUSH PANDEY

Q3. 1728, 998, 1511, 1167, 1384, 1260, 1323
(a) 998
(b) 1511
(c) 1323
(d) 1167
(e) 1260
L1Difficulty 3
Qtags Wrong Series
QCreator AYUSH PANDEY

Q4. 2.5, 60, 720, 4320, 12960, 19480, 14580
(a) 720
(b) 4320
(c) 12960
(d)19480

(e) 14580
L1Difficulty 3
Qtags Wrong Series
QCreator AYUSH PANDEY

Q5. 11.5, 34, 58, 85, 116.5, 154, 200
(a) 200
(b) 85
(c) 116.5
(d) 154
(e) 34
L1Difficulty 3
Qtags Wrong Series
QCreator AYUSH PANDEY

Q6. 810, 820, 832, 868, 1012, 1732, 6052
(a) 6052
(b) 810
(c) 868
(d) 832
(e) 1732
L1Difficulty 3
QTags Wrong Series
QCreator SHIVAM JINDAL

Q7. 1024, 350, 832, 508, 704, 604, 640
(a) 1024
(b) 640
(c) 704
(d) 350
(e) 508
L1Difficulty 4
QTags Wrong Series
QCreator SHIVAM JINDAL

Directions (8 -15): इनमें से प्रत्येक प्रश्न में, दो समीकरण (I) और (II) दिए गए हैं। दोनों समीकरणों को हल करें और उत्तर दीजिए-

(a) यदि $x>y$

(b) यदि $x\geq y$

(c) यदि $x<y$

(d) यदि $x\leq y$

(e) यदि $x = y$ या x और y के बीच कोई संबंध स्थापित नहीं किया जा सकता है।

Q8. (i) $8x^2 + 18x - 11 = 0$
(ii) $4y^2 + 17y + 15 = 0$
L1Difficulty 3
QTags Quadratic Inequalities
QCreator AYUSH PANDEY

Q9. (i) $3x^2 - 32x + 64 = 0$
(ii) $y^2 - 17y + 72 = 0$
L1Difficulty 3
QTags Quadratic Inequalities
QCreator AYUSH PANDEY

Q10. (i) $2x^2 + 8x - 24 = 0$
(ii) $y^2 + 13y + 42 = 0$
L1Difficulty 3
QTags Quadratic Inequalities
QCreator AYUSH PANDEY

Q11. (i) $2x^2 - 15x + 22 = 0$
(ii) $3y^2 - 21y + 18 = 0$
L1Difficulty 3
QTags Quadratic Inequalities
QCreator AYUSH PANDEY

Q12. (i) $x^2 - 30x + 144 = 0$
(ii) $y^2 - 50y + 624 = 0$
L1Difficulty 3
QTags Quadratic Inequalities
QCreator AYUSH PANDEY

Q13. (i). $2x^2 - 23x + 56 = 0$
(ii). $3y^2 - 14y + 15 = 0$
L1Difficulty 3
QTags Quadratic Inequalities
QCreator AYUSH PANDEY

Q14. (i) $\frac{10}{x^2} - \frac{13}{x} + 4 = 0$
(ii) $\frac{14}{y^2} + 2 = \frac{11}{y}$
L1Difficulty 3
QTags Quadratic Inequalities
QCreator AYUSH PANDEY

Q15. (i) $6x^2 - 17x + 10 = 0$

(ii) $5y^2 - 28y + 15 = 0$

L1Difficulty 3

QTags Quadratic Inequalities

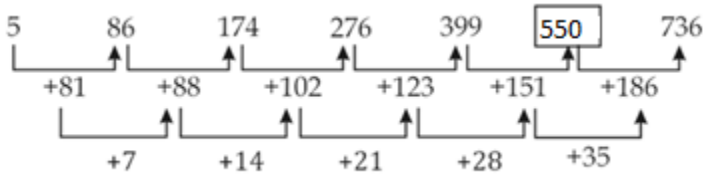
QCreator AYUSH PANDEY

Solutions

S1. Ans(c)

Sol.

Wrong number = 558

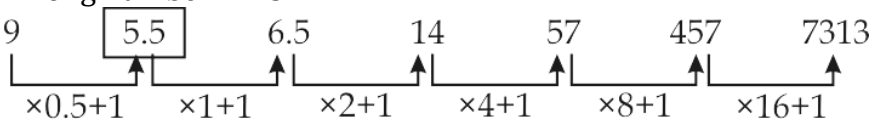


So, there should be 550 instead of 558.

S2. Ans(a)

Sol.

Wrong number = 4.5

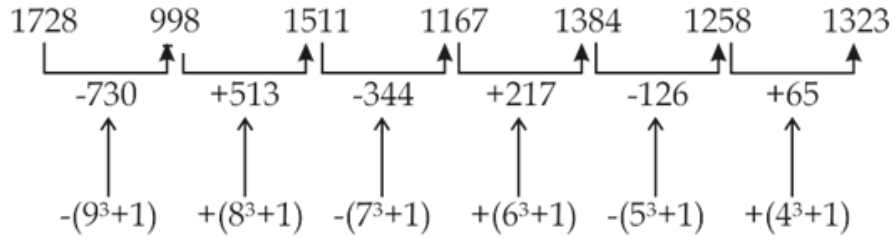


So, there should be 5.5 instead of 4.5.

S3. Ans(e)

Sol.

Wrong number = 1260



So, there should be 1258 instead of 1260

S4. Ans(d)

Sol.

Wrong number = 19480

Pattern of series –

$2.5 \times 24 = 60$

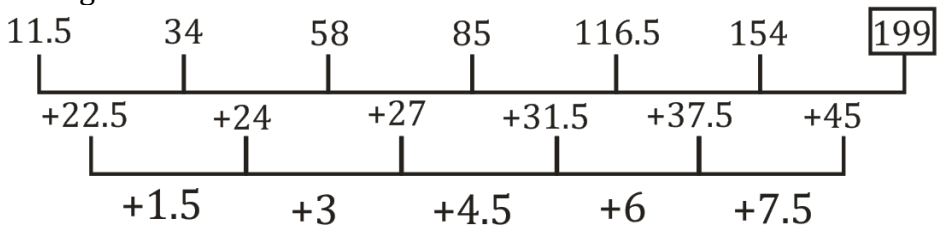
$60 \times 12 = 720$

$720 \times 6 = 4320$

$4320 \times 3 = 12960$
$12960 \times 1.5 = 19440$
$19440 \times 0.75 = 14580$

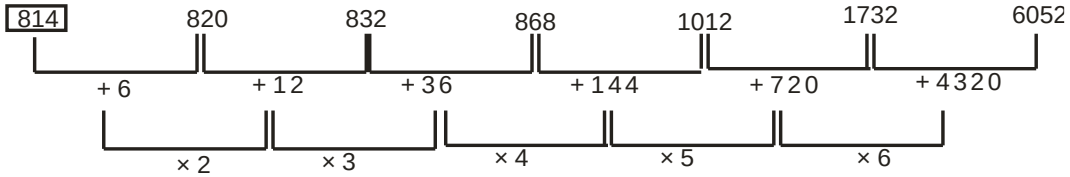
So, there should be 19440 instead of 19480.

S5. Ans(a)
Sol.
Wrong number = 200



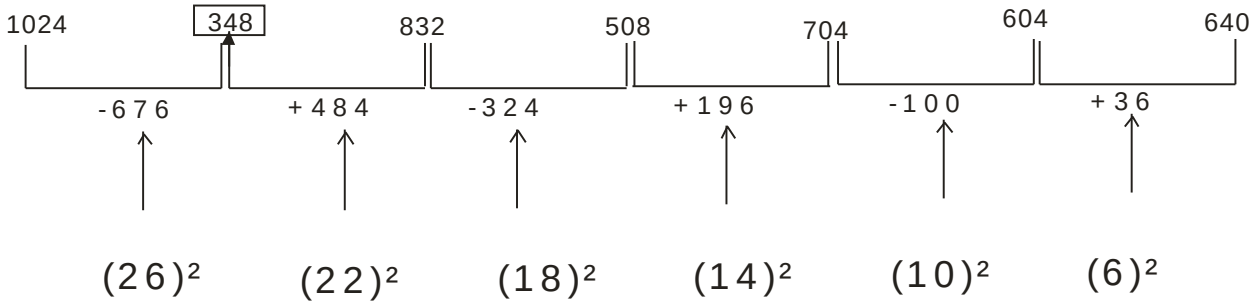
So, there should be199 instead of 200.

S6. Ans.(b)
Sol. Wrong number = 810
Pattern of series –



So, there should be 814 in place of 810.

S7. Ans.(d)
Sol. Wrong number = 350
Pattern of series –



So, there should be 348 in place of 350.

S8. Ans(e)
(i) $8x^2 + 18x - 11 = 0$
$8x^2 + 22x - 4x - 11 = 0$
$2x(4x + 11) - 1(4x + 11) = 0$
$(4x + 11)(2x - 1) = 0$

$x = -\frac{11}{4}, \frac{1}{2}$

(ii) $4y^2 + 17y + 15 = 0$

$4y^2 + 12y + 5y + 15 = 0$

$4y (y + 3) + 5 (y + 3) = 0$

$(y + 3) (4y + 5) = 0$

$y = -3 , -\frac{5}{4}$

No relation

S9. Ans (d)

(i)$3x^2 – 32x + 64 = 0$

$3x^2 - 24x – 8x + 64 = 0$

$3x (x – 8) - 8 (x – 8) = 0$

$(x – 8) (3x – 8) = 0$

$x = 8 , \frac{8}{3}$

(ii)$y^2 – 17y + 72 = 0$

$y^2 – 8y – 9y + 72 = 0$

$y (y – 8) – 9 (y – 8) = 0$

$(y – 8) (y – 9) = 0$

$y = 8 , 9$

$x \leq y$

S10. Ans(b)

(i)$2x^2 + 8x – 24 = 0$

$2x^2 + 12x – 4x – 24 = 0$

$2x (x + 6) – 4(x + 6) = 0$

$(2x – 4) (x + 6) = 0$

$x = 2 , - 6$

(ii) $y^2 + 13y + 42 = 0$

$y^2 + 7y + 6y + 42 = 0$

$y (y + 7) + 6(y + 7) = 0$

$(y + 7) (y + 6) = 0$

$y = - 6 , - 7$

$x \geq y$

S11. Ans (e)

(i) $2x^2 – 15x + 22 = 0$

$2x^2 - 11x – 4x + 22 = 0$

$x (2x – 11) – 2(2x – 11) = 0$

$(x – 2) (2x – 11) = 0$

$x = 2 , 5.5$

(ii) $3y^2 – 21y + 18 = 0$

$3y^2 – 18y – 3y + 18 = 0$

$3y (y – 6) – 3(y – 6)= 0$

(3y – 3) (y – 6) = 0
y = 1 , 6
No relation

S12. Ans(d)

(i) $x^2 - 30x + 144 = 0$
$x^2 - 24x - 6x + 144 = 0$
$x(x - 24) - 6(x - 24) = 0$
$(x - 24)(x - 6) = 0$
$x = 24, 6$

(ii) $y^2 - 50y + 624 = 0$
$y^2 - 24y - 26y + 624 = 0$
$y(y - 24) - 26(y - 24) = 0$
$(y - 24)(y - 26) = 0$
$y = 24, 26$
$x \leq y$

S13. Ans.(a)
Sol.
I. $2x^2 - 23x + 56 = 0$
$2x^2 - 7x - 16x + 56 = 0$
$x(2x - 7) - 8(2x - 7) = 0$
$(x - 8)(2x - 7) = 0$
$x = 8, \frac{7}{2}$
II. $3y^2 - 14y + 15 = 0$
$3y^2 - 5y - 9y + 15 = 0$
$y(3y - 5) - 3(3y - 5) = 0$
$y = 3, \frac{5}{3}$
$\therefore x > y$

S14. Ans. (d)
Sol.
I. $\frac{10}{x^2} - \frac{13}{x} + 4 = 0$
$\Rightarrow 4x^2 - 13x + 10 = 0$
$\Rightarrow 4x^2 - 8x - 5x + 10 = 0$
$4x(x - 2) - 5(x - 2) = 0$
$(4x - 5)(x - 2) = 0$
$x = \frac{5}{4}, 2$
II. $\frac{14}{y^2} + 2 = \frac{11}{y}$

$\Rightarrow 2y^2 - 11y + 14 = 0$
$\Rightarrow 2y^2 - 7y - 4y + 14 = 0$
$\Rightarrow y(2y - 7) - 2(2y - 7) = 0$
$y = 2, \frac{7}{2}$
$y \geq x$

S15. Ans.(e)
Sol.

I. $6x^2 - 17x + 10 = 0$
$6x^2 - 12x - 5x + 10 = 0$
$6x(x - 2) - 5(x - 2) = 0$
$x = 2, 5/6$

II. $5y^2 - 28y + 15 = 0$
$5y^2 - 25y - 3y + 15 = 0$
$5y(y - 5) - 3(y - 5) = 0$
$y = 5, ⅗$
$\therefore$ No relation