Course: IBPS Main 2020

Subject: Wrong Series & Quadratic Equation

Time:15 Minutes
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Direction (1-7): निम्नलिखित दी गई संख्या श्रृंखला में गलत पद ज्ञात कीजिए:

Q1. 124, 145, 258, 801, 3268, 16465, 99006.
(a) 145
(b) 258
(c) 801
(d) 16465
(e) 3268
L1Difficulty 3
QTags Wrong Series
QCreator AYUSH PANDEY

Q2. 4755, 4674, 4553, 4384, 4158, 3870, 3509,
(a) 4755
(b) 3509
(c) 4553
(d) 4158
(e) 3870
L1Difficulty 3
QTags Wrong Series
QCreator AYUSH PANDEY

Q3. 1463, 1620, 1729, 1801, 1843, 1863, 1869
(a) 1463
(b) 1801
(c) 1843
(d) 1863
(e) 1620
L1Difficulty 3
QTags Wrong Series
QCreator AYUSH PANDEY

Q4. 5140, 10240, 10240, 5120, 1280, 160, 10
(a) 10240
(b) 1280
(c) 5120
(d) 5140
(e) 160

L1Difficulty 3
QTags Wrong Series
QCreator AYUSH PANDEY

Q5. 8327, 6611, 5621, 5117, 4907, 4848, 4841
(a) 6611
(b) 5621
(c) 4848
(d) 4841
(e) 8327
L1Difficulty 3
QTags Wrong Series
QCreator AYUSH PANDEY

Q6. 40, 20, 24, 55, 202, 991, 5926
(a) 24
(b) 55
(c) 40
(d) 991
(e) 5926
L1Difficulty 3
QTags Wrong Series
QCreator AYUSH PANDEY

Q7. 720, 720, 714, 694, 654, 580, 470
(a) 654
(b) 714
(c) 694
(d) 580
(e) 470
L1Difficulty 3
QTags Wrong Series
QCreator AYUSH PANDEY

Directions (8-12): इनमें से प्रत्येक प्रश्न में, दो समीकरण (I) और (II) दिए गए हैं। दोनों समीकरणों को हल करें और उचित उत्तर चुनिए:

(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) $3x^2 - 17x + 20 = 0$
(ii) $5y^2 - 28y + 15 = 0$
L1Difficulty 3
QTags Quadratic Inequalities
QCreator AYUSH PANDEY
Q9. (i) $6x^2 = 11x - 4$
(ii) $2y^2 = 15y + 8$
L1Difficulty 3
QTags Quadratic Inequalities
QCreator AYUSH PANDEY
Q10. (i) $2(x - 3)^2 = (x - 3)$
(ii) $5y^2 + 6y = -1$
L1Difficulty 3
QTags Quadratic Inequalities
QCreator AYUSH PANDEY
Q11. (i) $7x^2 + 61x + 40 = 0$
(ii) $5y^2 - 13y - 28 = 0$
L1Difficulty 3
QTags Quadratic Inequalities
QCreator AYUSH PANDEY
Q12. (i) $x^2 - 11x + 24 = 0$
(ii) $2y^2 - 9y + 9 = 0$
L1Difficulty 3
QTags Quadratic Inequalities
QCreator AYUSH PANDEY

Directions (13-15): दिए गए द्विघात समीकरणों को हल करें और अपने उत्तर के आधार पर सही विकल्प को चिह्नित करें-

Q13. I. $(2x - 4)^2 = 49$
II. $(3y + 7)^2 = 1$
(a) $x \leq y$
(b) x और y के बीच कोई संबंध स्थापित नहीं किया जा सकता है.
(c) $x > y$
(d) $x < y$
(e) $x \geq y$
L1Difficulty 3
QTags Quadratic Inequalities
QCreator AYUSH PANDEY

Q14. I. $3x^2 - 5x - 2 = 0$

II. $4y^2 - 24y + 35 = 0$

(a) $x \geq y$

(b) $x \leq y$

(c) $x > y$

(d) x और y के बीच कोई संबंध स्थापित नहीं किया जा सकता है.

(e) $x < y$

L1Difficulty 3

QTags Quadratic Inequalities

QCreator AYUSH PANDEY

Q15. I. $\frac{10}{x^2} - \frac{13}{x} + 4 = 0$

II. $\frac{14}{y^2} + 2 = \frac{11}{y}$

(a) $x \leq y$

(b) $x < y$

(c) $x > y$

(d) $x \geq y$

(e) x और y के बीच कोई संबंध स्थापित नहीं किया जा सकता है.

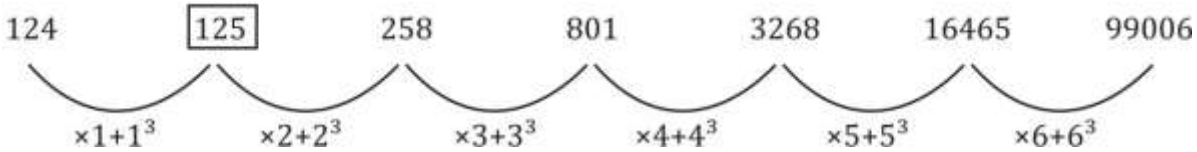
L1Difficulty 3

QTags Quadratic Inequalities

QCreator AYUSH PANDEY

S1. Ans.(a)

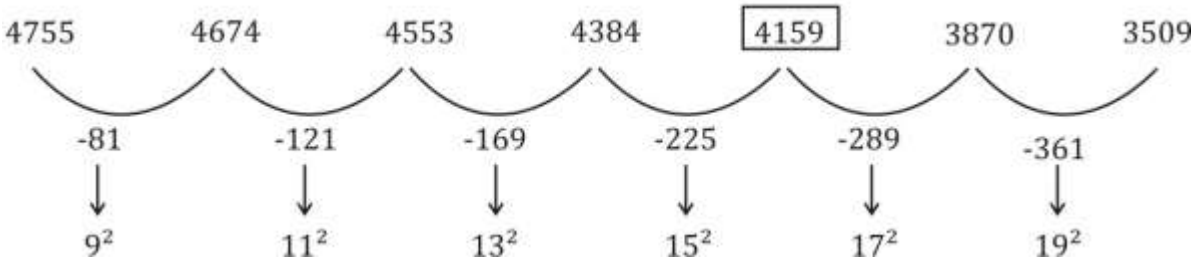
Sol.



Wrong number is 145.

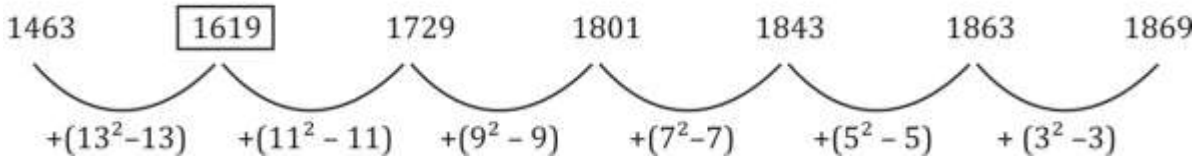
S2. Ans.(d)

Sol.



Wrong Number = 4158.

S3. Ans.(e)
Sol.

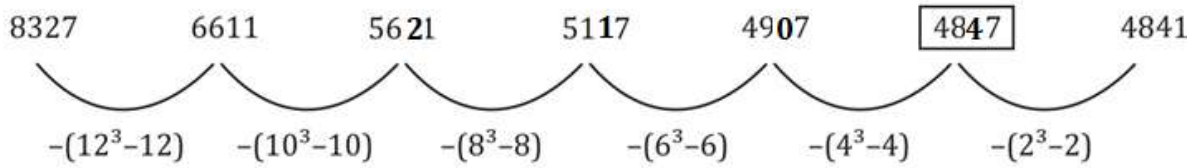


Wrong Number = 1620.

S4. Ans.(d)
Sol.

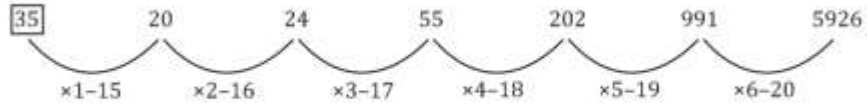
Wrong Number = 5140.

S5. Ans.(c)
Sol.



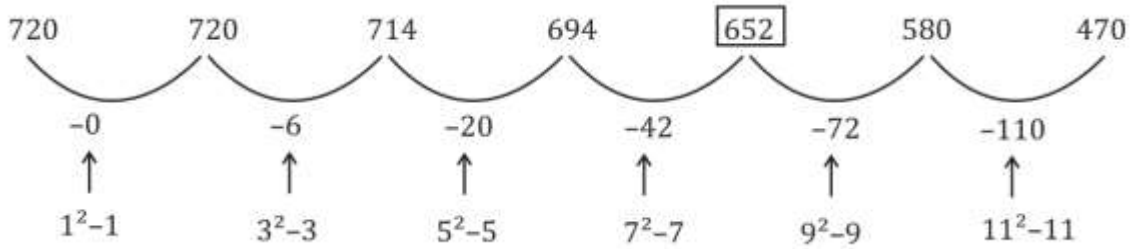
Wrong Number = 4870.

S6. Ans.(c)
Sol.



Wrong number = 40

S7. Ans.(a)
Sol.



Wrong number = 654

S8. Ans.(e)

Sol.

I. $3x^2 - 17x + 20 = 0$

$3x^2 - 12x - 5x + 20 = 0$

$3x(x - 4) - 5(x - 4) = 0$

$x = 4, 5/3$

II. $5y^2 - 28y + 15 = 0$

$5y^2 - 25y - 3y + 15 = 0$

$5y(y - 5) - 3(y - 5) = 0$

$y = 5, ⅗$

∴ No relation

S9. Ans.(e)

Sol.

I. $6x^2 - 11x + 4 = 0$

$6x^2 - 8x - 3x + 4 = 0$

$2x(3x - 4) - 1(3x - 4) = 0$

$x = \frac{4}{3}, \frac{1}{2}$

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

$2y^2 - 16y + y - 8 = 0$

$2y(y - 8) + 1(y - 8) = 0$

$y = 8, \frac{-1}{2}$

∴ No relation

S10. Ans.(a)

Sol.

I. $2(x^2 - 6x + 9) = x - 3$

$2x^2 - 12x + 18 - x + 3 = 0$

$2x^2 - 13x + 21 = 0$

$2x^2 - 6x - 7x + 21 = 0$

$2x(x - 3) - 7(x - 3) = 0$

$x = 3, \frac{7}{2}$

II. $5y^2 + 6y + 1 = 0$
$5y^2 + 5y + y + 1 = 0$
$5y (y + 1) + 1 (y + 1) = 0$
$y = -1, \frac{-1}{5}$
x > y

S11. Ans.(e)
Sol.
I. $7x^2 + 61x + 40 = 0$
$7x^2 + 56x + 5x + 40 = 0$
$7x (x + 8) + 5 (x + 8) = 0$
$x = -8, \frac{-5}{7}$
II. $5y^2 - 13y - 28 = 0$
$5y^2 - 20y + 7y - 28 = 0$
$5y (y - 4) + 7 (y - 4) = 0$
$y = 4, \frac{-7}{5}$
$\therefore$ No relation

S12. Ans.(b)
Sol.
I. $x^2 - 11x + 24 = 0$
$\Rightarrow x^2 - 8x - 3x + 24 = 0$
$\Rightarrow x(x - 8) - 3(x - 8) = 0$
$\Rightarrow (x - 3)(x - 8) = 0$
$\therefore x = 3 \; or \; 8$
II. $2y^2 - 9y + 9 = 0$
$\Rightarrow 2y^2 - 3y - 6y + 9 = 0$
$\Rightarrow y(2y - 3) - 3(2y - 3) = 0$
$\Rightarrow (2y - 3)(y - 3)$
$\therefore y = \frac{3}{2} or \; 3$
$x \geq y$

S13. Ans. (c)
Sol.
I. $(2x - 4)^2 = 49$
$\Rightarrow (2x - 4) = \pm 7$
$\Rightarrow x = \frac{11}{2}, -\frac{3}{2}$
II. $(3y + 7)^2 = 1$

$(3y + 7) = \pm 1$

$\Rightarrow y = -2, -\frac{8}{3}$

$x > y$

S14. Ans. (e)

Sol.

I. $3x^2 - 5x - 2 = 0$

$3x^2 - 6x + x - 2 = 0$

$3x(x - 2) + 1(x - 2) = 0$

$(x - 2)(3x + 1) = 0$

$x = 2, -\frac{1}{3}$

II. $4y^2 - 24y + 35 = 0$

$4y^2 - 10y - 14y + 35 = 0$

$2y(2y - 5) - 7(2y - 5) = 0$

$(2y - 5)(2y - 7) = 0$

$y = \frac{5}{2}, \frac{7}{2}$

$x < y$

S15. Ans. (a)

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. $\frac{14}{y^2} + 2 = \frac{11}{y}$

$\Rightarrow 2y^2 - 11y + 14 = 0$

$\Rightarrow 2y^2 - 7y - 4y + 14 = 0$

$\Rightarrow y(2y - 7) - 2(2y - 7) = 0$

$y = 2, \frac{7}{2}$

$y \geq x$