**Subject: Missing Series and Simplification**

**Time:15 Minutes**
**Published Date: 30th July 2020**

**Directions (1-5): निम्नलिखित प्रश्नों में प्रश्नवाचक चिह्न (?) के स्थान पर क्या मान आना चाहिए-**

Q1. $180$ का $35\% + 18^2 = (27)^{\frac{5}{3}} + ?^2$
(a) 16
(b) 14
(c) 8
(d) 12
(e) 18
L1Difficulty 3
QTagsSimplification
QCreatorDeepak Rohilla

Q2. $\frac{323}{357} \times 441 - 15 \times 21 = ?$
(a) 84
(b) 63
(c) 42
(d) 21
(e) 105
L1Difficulty 3
QTagsSimplification
QCreatorDeepak Rohilla

Q3. $7\frac{4}{5} - 3\frac{2}{3} + 4\frac{8}{15} = \frac{234}{?}$
(a) 9
(b) 18
(c) 27
(d) 54
(e) 81
L1Difficulty 3
QTagsSimplification
QCreatorDeepak Rohilla

Q4. $?^{\frac{2}{3}} = 150$ का $64\% + 7 \times 3 - 9^2$
(a) 27
(b) 343
(c) 125
(d) 64

(e) 216
L1Difficulty 3
QTagsSimplification
QCreatorDeepak Rohilla

Q5.　$? \times 4 - 40^2 = 14^2 - 36 \times 44$
(a) 45
(b) 51
(c) 53
(d) 55
(e) 57
L1Difficulty 3
QTagsSimplification
QCreatorDeepak Rohilla

Directions (6-15): निम्नलिखित संख्या श्रृंखला में प्रश्नवाचक चिह्न (?) के स्थान पर क्या मान आएगा-

Q6.　1130, 1164, 1232, 1334, 1470, ?
(a) 1674
(b) 1640
(c) 1606
(d) 1572
(e) 1623
L1Difficulty 3
QTagsMISSING SERIES Quant
QCreatorDeepak Rohilla

Q7.　353, 54, 380, 81, 444, 145, 569, ?, 785
(a) 209
(b) 361
(c) 270
(d) 226
(e) 488
L1Difficulty 3
QTagsMISSING SERIES Quant
QCreatorDeepak Rohilla

Q8.　2, 6, 21, 88, 445, ?
(a) 3122
(b) 2230
(c) 2766
(d) 2676
(e) 3568
L1Difficulty 3

Q9.     5,   6,   9.5,   15,   18.5,   33,   32,     ?
(a) 51
(b) 68
(c) 58
(d) 60
(e) 63
L1Difficulty 3

Q10. 12, 6, 9, 22.5, 78.75, ?
(a) 345.375
(b) 354.375
(c) 374.535
(d) 375.435
(e) 343.755
L1Difficulty 3

Q11.    23, 29, 17, 35,  ?,  41
(a) 13
(b) 11
(c) 12
(d) 18
(e) 21
L1Difficulty 3

Q12.    6, 10, 17, 28.5,  46.75,  ?
(a) 77.125
(b) 76.125
(c) 75.125
(d) 75.25
(e) 72.75
L1Difficulty 3

Q13.    670, 894, 1150, 1438,  ?
(a) 1758
(b) 1594

(c) 1930
(d) 1290
(e) 1225
L1Difficulty 3
QTagsMISSING SERIES Quant
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Q14.   3, 5, 19, 101, ?, 6445
(a) 710
(b)712
(c) 714
(d) 715
(e) 725
L1Difficulty 3
QTagsMISSING SERIES Quant
QCreatorDeepak Rohilla

Q15.   7, 8, 16, 12, 41, 28, ?
(a) 90
(b) 85
(c) 92
(d) 86
(e) 84
L1Difficulty 3
QTagsMISSING SERIES Quant
QCreatorDeepak Rohilla

## Solutions

S1. Ans.(d)
Sol.

$$\Rightarrow 35\% \ of \ 180 + 18^2 = (27)^{\frac{5}{3}} + ?^2$$
$$\Rightarrow 63 + 324 = 243 + ?^2$$
$$\Rightarrow 387 - 243 = ?^2$$
$$\Rightarrow ?^2 = 144$$
$$\Rightarrow ? = 12$$

S2. Ans.(a)
Sol.

$$\frac{323}{357} \times 441 - 15 \times 21 = ?$$
$$\Rightarrow \frac{19 \times 17}{17 \times 21} \times 441 - 15 \times 21 = ?$$
$$\Rightarrow ? = 19 \times 21 - 15 \times 21 = 4 \times 21 = 84$$

S3. Ans.(c)

Sol.

$$7\frac{4}{5} - 3\frac{2}{3} + 4\frac{8}{15} = \frac{234}{?}$$
$$8 + \frac{12 - 10 + 8}{15} = \frac{234}{?}$$
$$8 + \frac{2}{3} = \frac{234}{?}$$
$$\frac{26}{3} = \frac{234}{?}$$
$$\Rightarrow ? = 27$$

S4. Ans.(e)
Sol.

$$?^{\frac{2}{3}} = 64\% \ of \ 150 + 7 \times 3 - 9^2$$
$$?^{\frac{2}{3}} = 96 + 21 - 81$$
$$?^{\frac{2}{3}} = 36$$
$$\Rightarrow ? = 36^{\frac{3}{2}} = 216$$

S5. Ans.(c)
Sol.

$$? \times 4 - 40^2 = 14^2 - 36 \times 44$$
$$? \times 4 = 196 + 40^2 - (40 - 4) \times (40 + 4)$$
$$? \times 4 = 196 + 40^2 - 40^2 + 4^2 = 212$$
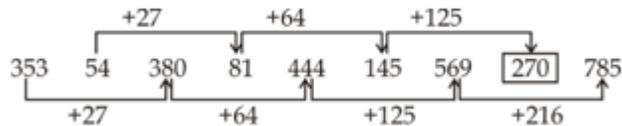$$? = \frac{212}{4} = 53$$

S6. Ans.(b)
Sol.
The pattern is +17×2, +17×4, +17×6, +17×8, +17×10…
∴ ? = 1470 + 17 × 10
= 1640

S7. Ans.(c)



Sol.

S8. Ans.(d)
Sol.
Pattern is ×2+2, ×3+3, ×4+4, ×5+5, ×6+6
∴ ? = 445 × 6+ 6
= 2676

S9. Ans.(d)
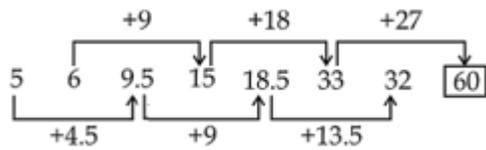
```
         +9        +18        +27
      ┌──────┐  ┌──────┐  ┌──────┐
  5   6  9.5  15  18.5  33  32  [60]
      └────┐  └────┐  └────┐
        +4.5      +9      +13.5
```
Sol.

S10. Ans.(b)
Sol.
Pattern is ×0.5, ×1.5, ×2.5, ×3.5, ×4.5
∴ ? = 78.75 × 4.5
= 354.375

S11. Ans.(b)
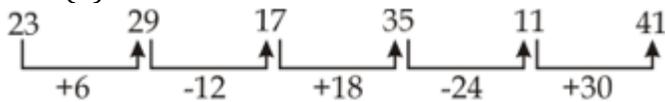
```
  23      29      17      35      11      41
   └──┐    └──┐    └──┐    └──┐    └──┐
     +6      -12     +18     -24     +30
```
Sol.

S12. Ans.(c)
    $6 \times 1.5 + 1 = 10$
    $10 \times 1.5 + 2 = 17$
    $17 \times 1.5 + 3 = 28.5$
    $28.5 \times 1.5 + 4 = 46.75$
    $46.75 \times 1.5 + 5 = 75.125$
Sol.

S13. Ans.(a)
    $26^2 - 6 = 670$
    $30^2 - 6 = 894$
    $34^2 - 6 = 1150$
    $38^2 - 6 = 1438$
    $42^2 - 6 = 1758$
Sol.

S14. Ans.(d)
    $3 \times 1 + 2 = 5$
    $5 \times 3 + 4 = 19$
    $19 \times 5 + 6 = 101$
    $101 \times 7 + 8 = \boxed{715}$
    $715 \times 9 + 10 = 6445$
Sol.

S15. Ans.(a)

```
            +4              +16
      ┌──────────┐    ┌──────────┐
      │          ↓    │          ↓
7      8    16    12    41    28    90
│           ↑│          ↑│          ↑
└─────┬─────┘└─────┬─────┘└─────┬─────┘
     +9           +25          +49
```

Sol.