

**Directions (1 – 5): In the following number series one of the numbers is wrong. Find out the wrong one, put it in place of (A) and form a new series based on the same pattern as given in question and find the number that should come in place of (E).**

Q1. 2    10    27    113    561    3369    23581  
      A      B      C      D      E      F

- (a) 1265
- (b) 1485
- (c) 1521
- (d) 1665
- (e) 2865

Q2. 2    1.5    2.5    9    32    264    4240  
      A      B      C      D      E      F

- (a) 40
- (b) 364
- (c) 486
- (d) 284
- (e) 60

Q3. 2    3    12    38    102    227    443  
      A      B      C      D      E      F

- (a) 120
- (b) 254
- (c) 468
- (d) 112
- (e) 156

Q4. 3    8    14    48    200    1010    6072  
      A      B      C      D      E      F

- (a) 320
- (b) 380
- (c) 420
- (d) 285
- (e) 980

Q5. 128    64    72    96    192    480    1440  
      A      B      C      D      E      F

- (a) 96
- (b) 108
- (c) 182
- (d) 156
- (e) 208

**Directions (6 – 10):** In the following number series one of the numbers is wrong. Find out the wrong one, put it in place of (A) and form a new series based on the same pattern as given in question and find the number that should come in place of (E).

Q6. 1 2 6 26 158 1101 8802  
A B C D E F

- (a) 23
- (b) 159
- (c) 1265
- (d) 9158
- (e) 5243

Q7. 1728 1729 1737 1764 1810 1835 2051  
A B C D E F

- (a) 1813
- (b) 1846
- (c) 1919
- (d) 2132
- (e) 2218

Q8. 128 65 67 140 560 4496  
A B C D E F

- (a) 608
- (b) 68
- (c) 4525
- (d) 4927
- (e) 72425

Q9. 7 16 57 228 1160 6990 48972  
A B C D E F

- (a) 3425
- (b) 2152
- (c) 4526
- (d) 6520
- (e) 7160

Q10. 1331 1333 1336 1341 1347 1359 1372  
A B C D E F

- (a) 1382
- (b) 1397
- (c) 1364
- (d) 1368
- (e) 1383

**Directions (11 – 15): In the following number series one of the numbers is wrong. Find out the wrong one, put it in place of (A) and form a new series based on the same pattern as given in question and find the number that should come in place of (E).**

Q11. 1231, 1374, 1554, 1824, 2147, 2546

(A), (B), (C), (D), (E)

(a) 2430

(b) 2280

(c) 2670

(d) 2470

(e) 2350

Q12. 5539, 5536, 5528, 5506, 5314, 2242

(A), (B), (C), (D), (E)

(a) 4238

(b) 5303

(c) 6529

(d) 2341

(e) 2639

Q13. 1240, 1492, 1756, 2032, 2328, 2620

(A), (B), (C), (D), (E)

(a) 8340

(b) 2538

(c) 5204

(d) 2650

(e) 3408

Q14. 3760, 3763, 3749, 3777, 3721, 3833

(A), (B), (C), (D), (E)

(a) 3725

(b) 3526

(c) 3628

(d) 3927

(e) 4272

Q15. 1256, 1258, 1260, 1278, 1326, 1426

(A), (B), (C), (D), (E)

(a) 1762

(b) 1544

(c) 1328

(d) 1620

(e) 1840

**S1. Ans. (c)**

**Sol.**

The given pattern is

$$\times 2 + 7 \quad \times 3 - 6 \quad \times 4 + 5 \quad \times 5 - 4 \quad \times 6 + 3 \quad \times 7 - 2$$

So, wrong number = 10

New series will be

$$10 \times 2 + 7 = 27$$

$$27 \times 3 - 6 = 75$$

$$75 \times 4 + 5 = 305$$

$$305 \times 5 - 4 = 1521$$

So, E = **1521**

**S2. Ans. (e)**

**Sol.**

The given pattern is

$$\times 0.5 + 0.5, \quad \times 1 + 1, \quad \times 2 + 2, \quad \times 4 + 4, \quad \times 8 + 8, \quad \times 16 + 16$$

So, wrong number = 9

So, new series will be

$$9 \times 0.5 + 0.5 = 5$$

$$5 \times 1 + 1 = 6$$

$$6 \times 2 + 2 = 14$$

$$14 \times 4 + 4 = 60$$

So, E = 60

**S3. Ans. (d)**

**Sol.**

The given pattern is

$$+1^3, +2^3, +3^3, +4^3, +5^3, +6^3$$

So, wrong number is 12

New series will be

$$12+1=13$$

$$13+8=21$$

$$21+27=48$$

$$48+64=112$$

So, E = 112

**S4. Ans. (a)**

**Sol.**

The given pattern is

$$\times 1 + 2 \quad \times 2 + 4 \quad \times 3 + 6 \quad \times 4 + 8 \quad \times 5 + 10 \quad \times 6 + 12$$

So, wrong number = 8

The new series will be

$$8 \times 1 + 2 = 10$$

$$10 \times 2 + 4 = 24$$

$$24 \times 3 + 6 = 78$$
$$78 \times 4 + 8 = 320$$

So, E=320

**S5. Ans. (b)**

**Sol.**

The given pattern is

$$\times \frac{1}{2} \quad \times 1 \quad \times \frac{3}{2} \quad \times 2 \quad \times \frac{5}{2} \quad \times 3$$

So, wrong number = 72

$$72 \times \frac{1}{2} = 36$$

$$36 \times 1 = 36$$

$$36 \times \frac{3}{2} = 54$$

$$54 \times 2 = 108$$

So, E = 108

**S6. Ans.(d)**

**Sol.**

The pattern of the given series is

$$\times 3 - 1, \quad \times 4 - 2, \quad \times 5 - 3, \quad \times 6 - 4 \dots\dots\dots$$

Wrong number = 26

As per the above pattern

$$26 \times 3 - 1 = 77$$

$$77 \times 4 - 2 = 306$$

$$306 \times 5 - 3 = 1527$$

$$1527 \times 6 - 4 = 9158$$

So, E=9158.

**S7. Ans. (b)**

**Sol.**

The pattern of the given series is

$$+1^2, +2^3, +3^2, +4^3, +5^2 \dots\dots\dots$$

Wrong number = 1764

As per the above pattern,

$$1764 + (1)^2 = 1765$$

$$1765 + (2)^3 = 1773$$

$$1773 + (3)^2 = 1782$$

$$1782 + (4)^3 = 1846$$

So, E=1846

**S8. Ans. (a)**

**Sol.**

The pattern of the given series is

$$\times \frac{1}{2} + 1, \quad \times 1 + 2, \quad \times 2 + 4, \quad \times 4 + 8 \dots$$

Wrong number = 140

As per the above pattern,

$$140 \times 0.5 + 1 = 71$$

$$71 \times 1 + 2 = 73$$

$$73 \times 2 + 4 = 150$$

$$150 \times 4 + 8 = 608$$

So, E=608

S9. Ans. (e)

Sol.

The pattern of the given series is

$$+1 \times 2, \quad +2 \times 3, \quad +3 \times 4, \quad +4 \times 5, \quad +5 \times 6 \dots$$

Wrong number = 57

As per the above pattern,

$$(57+1) \times 2 = 116$$

$$(116+2) \times 3 = 354$$

$$(354+3) \times 4 = 1428$$

$$(1428+4) \times 5 = 7160$$

So, E= 7160

S10. Ans. (c)

Sol.

The pattern of the given series is

Prime number

$$+2, \quad +3, \quad +5, \quad +7, \quad +11, \quad +13, \quad +17$$

Wrong number = 1347

As per the above pattern,

$$1347 + 2 = 1349$$

$$1349 + 3 = 1352$$

$$1352 + 5 = 1357$$

$$1357 + 7 = 1364$$

So, E=1364

S11. Ans (d)

Sol. The pattern is

$$1231 + 11 \times 13 = 1374$$

$$1374 + 13 \times 15 = 1569 \text{ not } 1554$$

$$1569 + 15 \times 17 = 1824$$

$$1824 + 17 \times 19 = 2147$$

$$2147 + 19 \times 21 = 2546$$

$$\text{So, (E)} = 1554 + 11 \times 13 + 13 \times 15 + 15 \times 17 + 17 \times 19 = \\ = 2470$$

S12. Ans.(b)

Sol. The given pattern is -

$$5539, 5536, 5530, 5506, 5314, 2242$$

$$\begin{array}{cccccc} \boxed{-3 \times 1} & \boxed{-3 \times 2} & \boxed{-6 \times 4} & \boxed{-24 \times 8} & \boxed{-192 \times 16} \\ (-3) & (-6) & (-24) & (-192) & (-3072) \end{array}$$

$$5536 - 6 = 5530, \text{ not } 5528.$$

$$\text{So, (E)} = 5528 - 3 - 6 - 24 - 192 = 5303.$$

S13. Ans.(e)

Sol. The given pattern is -

$$1240, 1492, 1756, 2032, 2320, 2620$$

$$\begin{array}{cccccc} \boxed{+252} & \boxed{+264} & \boxed{+276} & \boxed{+288} & \boxed{+300} \\ +252 & +264 & +276 & +288 & +300 \end{array}$$

$$2032 + 288 = 2320, \text{ not } 2328$$

$$\text{So, (E)} = 2328 + 252 + 264 + 276 + 288 = 3408.$$

S14. Ans.(a)

Sol. The given pattern is -

$$3756, 3763, 3749, 3777, 3721, 3833$$

$$\begin{array}{cccccc} \boxed{+7} & \boxed{-14} & \boxed{+28} & \boxed{-56} & \boxed{+112} \\ +7 & -14 & +28 & -56 & +112 \end{array}$$

$$3763 - 7 = 3756, \text{ not } 3760$$

$$\text{So, (E)} = 3760 + 7 - 14 + 28 - 56 = 3725$$

S15. Ans.(c)

Sol. The given pattern is -

$$1256, 1256, 1260, 1278, 1326, 1426$$

$$\begin{array}{cccccc} \boxed{1^3 - 1^2} & \boxed{2^3 - 2^2} & \boxed{3^3 - 3^2} & \boxed{4^3 - 4^2} & \boxed{5^3 - 5^2} \\ 1^3 - 1^2 & 2^3 - 2^2 & 3^3 - 3^2 & 4^3 - 4^2 & 5^3 - 5^2 \end{array}$$

$$1256 - (1^3 - 1^2) = 1256, \text{ not } 1258$$

$$\text{So, (E)} = 1258 + 0 + 4 + 18 + 48 = 1328$$