

Number Series

Directions: The following series are based on a specific pattern. In these series one number is wrong, find that odd one.

1. 5, 12, 23, 50, 141, ?

A) 415 B) 430 C) 439 D) 488 E) 452

2. 7, 13, 25, 45, 75, ?

A) 117 B) 153 C) 209 D) 123 E) 141

3. 4, 11, 19, 41, ?, 161

A) 62 B) 108 C) 79 D) 90 E) 85

4. 4, 8, 21, 59, ?, 314

A) 146 B) 134 C) 125 D) 191 E) 126

5. 11, 6, 5, 9, 16, ?

A) 66.5 B) 78.5 C) 89.5 D) 42.5 E) 31.5

6. 5, 8, 28, 162, ?, 12870

A) 1738 B) 2318 C) 1288 D) 2224 E) 2950

7. 3, 5, 10, 20, 37, ?

A) 68 B) 77 C) 78 D) 61 E) 63

8. 21, 35, 56, 91, 154, ?

A) 273 B) 289 C) 231 D) 240 E) 245

9. 5, 7, 11, 37, 143, ?

A) 733 B) 721 C) 764 D) 750 E) 784

10. 5, 7, 25, 131, ?, 8335

A) 865 B) 914 C) 1025 D) 802 E) 925

Approximate Calculations

Simplification Questions for SBI PO, IBPS PO/Clerk, IBPS RRB, NIACL, NICL, RBI Grade B, OICL, UIICL, BoB and other competitive exams.

1. $59\% \text{ of } 1600 + 26\% \text{ of } 450 - 17 \times 24 = x$

A) 653 B) 561 C) 265 D) 761 E) 628

2. $(86)^2 - (73)^2 - (36)^2 = x$

A) 376 B) 771 C) 893 D) 725 E) 628

3. $\sqrt{6561} + 12 \times 29 - 1248 \div 13 = x$

A) 284 B) 398 C) 276 D) 333 E) 319

4. $792 \div 12 + 1134 \div 18 - 728 \div 13 = x$

A) 73 B) 81 C) 76 D) 71 E) 67

5. $85\% \text{ of } 460 - 24\% \text{ of } 350 - 13 \times 19 = x$

A) 69 B) 54 C) 87 D) 37 E) 60

6. $74\% \text{ of } 250 - 826 \div 14 - 819 \div 13 = x$

A) 59 B) 81 C) 73 D) 86 E) 63

7. $5.6\% \text{ of } 250 + 6.4\% \text{ of } 350 + 4.8\% \text{ of } 450 = x$

A) 61.4 B) 52.5 C) 43.8 D) 58.0 E) 48.6

8. $4.8\% \text{ of } 250 + 1105 \div 13 - \sqrt{5476} = x$

A) 43 B) 37 C) 23 D) 29 E) 47

9. $15\% \text{ of } 620 + 18\% \text{ of } 350 - 18\% \text{ of } 650 = x$

A) 51 B) 46 C) 37 D) 41 E) 39

10. $2 \left(\frac{1}{3}\right) + 4 \left(\frac{2}{5}\right) - 5 \left(\frac{4}{15}\right) = x$

A) $\frac{11}{15}$ B) $\frac{8}{15}$ C) $1 \left(\frac{7}{15}\right)$ D) $1 \frac{8}{15}$ E) $1 \frac{3}{5}$

Quadratic Bodmas

Directions: What value should come in place of question mark.

26. $165\% \text{ of } 400 + 85\% \text{ of } 240 = ?\% \text{ of } 1080$

A. 70 B. 90 C. 80 D. 110 E. 100

27. $24473 - 12016 - 11037 + 22477 = ? + 9473$

A. 14136 B. 14424 C. 14760 D. 18342 E. 14572

28. $123 \times 8697 \div 223 = ?^2 + 36$

A. 67 B. 72 C. 85 D. 69 E. 83

29. $13 \times ? \times 6 = 47^2 - \sqrt{625}$

A. 32 B. 28 C. 36 D. 38 E. None of these

30. $882/9 - 7 \times 13 + \sqrt[3]{2197} = ?$

A. 20 B. 24 C. 27 D. 31 E. None of these

31. $7 \frac{2}{3} + 9 \frac{7}{12} + 11 \frac{3}{4} - 6 \frac{1}{2} = ?$

A. $25 \frac{3}{5}$ B. $22 \frac{1}{2}$ C. $23 \frac{3}{4}$ D. $22 \frac{3}{5}$ E. None of these

32. $25^{6.5} \times 25^{12.25} = 25^{21-?}$

A. 2.20 B. 2.25 C. 2.5 D. 3 E. None of these

33. $1332 \div 36 \times 23 + 287 - 189 = ?$

A. 1029 B. 988 C. 850 D. 949 E. None of these

34. $0.8\% \text{ of } 2580 + 16\% \text{ of } 685 = ?$

A. 125.76 B. 120.76 C. 130.24 D. 124.76 E. None of these

35. $(153 \times 1331) \div (11 \times 17) = ?$

A. 948 B. 1089 C. 1153 D. 1249 E. None of these

36. $\sqrt{1849} + \sqrt{529} - \sqrt{1521} = ?$

A. 34 B. 27 C. 36 D. 26 E. None of these

37. $9845 - 3746 + 5483 = 7416 + ?$

A. 3614 B. 4166 C. 2876 D. 3776 E. None of these

38. $5/13 \text{ of } 1456 \text{ of } 2/7 \text{ of } 136/17 = ?$

A. 1140 B. 1280 C. 1320 D. 1210 E. None of these

39. $4.8 \times 4.5 \times 3.6 \times 50 = ?$

A. 2888 B. 3688 C. 3888 D. 3288 E. None of these

40. $13^3 + 21^2 - 19^3 + 5360 = ?$

A. 1240 B. 1139 C. 1332 D. 1129 E. None of these

41. $(\sqrt{7} - \sqrt{10})^2 + (\sqrt{5} + \sqrt{14})^2 = (?)^3 - 28$

A. $\sqrt{2}$ B. 4 C. $\sqrt{6}$ D. 3 E. None of these

42. $64\% \text{ of } \sqrt{4096400} \div 1.6 = ? \times 2.56$

A. $\sqrt{10}$ B. 256 C. $\sqrt{160}$ D. 100 E. None of these

43. 38.4% of 1450 + 78.2% of 240 - ?2 = 20% of 77.4

A. $\sqrt{17}$ B. 19 C. 27 D. 81 E. None of these

44. $(2.89)^4 \div (4913 \div 1000)^3 \times (0.17 \times 10)^3 = (1.7)^{?-3}$

A. $\sqrt{4}$ B. 6 C. 2 D. 5 E. None of these

45. $\sqrt[3]{5}.832 + 35\% \text{ of } 6500 - ?\% \text{ of } 1250 = 222.8$

A. 164.32 B. 18.23 C. 174.32 D. 194.23 E. None of these

46. $13 \frac{9}{7}\% \text{ of } 2835 + 25\% \text{ of } 3248 = 1117 + ?$

A. 110 B. 100 C. 132 D. 50 E. None of these

47. $\sqrt{32 + \sqrt{13 + \sqrt{5 + \sqrt{16}}}} = ?$

A. $3\sqrt{2}$ B. 7 C. $4\sqrt{3}$ D. 6 E. None of these

48. $(0.0036)^{1/2} + (0.0169)^{1/2} = ? + 0.03$

A. 0.16 B. 0.12 C. 0.14 D. 0.26 E. None of these

49. $25\% \text{ of } \sqrt[3]{32859} + 75\% \text{ of } \sqrt[3]{79507} = ?$

A. 49.5 B. 36.5 C. 39.5 D. 41.5 E. None of these

50. $33^2 + 34^2 + 35 + 36^2 - 39^2 = ?$

A. 2025 B. 2055 C. 3025 D. 3155 E. None of these

Number Series Key

1. Option D

Pattern:

5.....12.....23.....50.....141.....488
.....+7.....+11.....+27.....+91.....+347
.....+4.....+16.....+64.....+256

2. Option A

Pattern:

$7 + (2 \times 3) = 13$
 $13 + (3 \times 4) = 25$
 $25 + (4 \times 5) = 45$
 $45 + (5 \times 6) = 75$
 $75 + (6 \times 7) = 117$

3. Option C

Pattern:

$4 \times 2 + 3 = 11$
 $11 \times 2 - 3 = 19$
 $19 \times 2 + 3 = 41$
 $41 \times 2 - 3 = 79$
 $79 \times 2 + 3 = 161$

4. Option A

Pattern:

4.....8.....21.....59.....146.....314
.....+4.....+13.....+38.....+87.....+168
.....+3².....+5².....+7².....+9²

5. Option D

Pattern:

$11 \times 0.5 + 0.5 = 6$
 $6 \times 1 - 1 = 5$
 $5 \times 1.5 + 1.5 = 9$
 $9 \times 1 - 1 = 16$
 $16 \times 2.5 + 2.5 = 42.5$

6. Option C

Pattern:

$\times 2 - 2$, $\times 4 - 4$, $\times 6 - 6$, $\times 8 - 8$, $\times 10 - 10$.

7. Option E

Pattern:

$+ (1^2+1)$, $+ (2^2+1)$, $+ (3^2+1)$, $+ (4^2+1)$, $+ (5^2+1)$

8. Option A

Pattern:

$21 \times 2 - 7 = 35$
 $35 \times 2 - 14 = 56$
 $56 \times 2 - 21 = 91$

$$91 \times 2 - 28 = 154$$

$$154 \times 2 - 35 = 273$$

9. Option B

Pattern:

$5 \times 1 + 2 = 7$
 $7 \times 2 - 3 = 11$
 $11 \times 3 + 4 = 37$
 $37 \times 4 - 5 = 143$
 $143 \times 5 + 6 = 721$

10. Option E

Pattern:

$5 \times 1 + 2 = 7$
 $7 \times 3 + 4 = 25$
 $25 \times 5 + 6 = 131$
 $131 \times 7 + 8 = 925$
 $925 \times 9 + 10 = 8335$

Approximate Calculations Key

1. Option A

2. Option B

3. Option D

4. Option A

5. Option E

6. Option E

7. Option D

8. Option C

9. Option E

10. Option C

Quadratic Bodmas Key

26. Option C

27. Option B

28. Option D

29. Option B

30. Option A

31. Option B

32. Option B

33. Option D

34. Option C

35. Option B

36. Option B

- 37. Option B
- 38. Option B
- 39. Option C
- 40. Option B
- 41. Option B
- 42. Option D
- 43. Option C
- 44. Option D
- 45. Option A
- 46. Option B
- 47. Option D
- 48. Option B
- 49. Option A
- 50. Option B