

NUMBER SERIES

1.22 12 11 ? 34 86

A) 17 B) 17.5 C) 16 D) 18.5 E) None

2.5 9 19 41 ? 145

A) 74 B) 76 C) 81 D) 86 E) None

3.1 9 65 ? 1969 7881

A) 393 B) 450 C) 425 D) 510 E) None

4.243 5 81 15 27 45 9 ?

A) 183 B) 81 C) 120 D) 135 E) None

5.8 9 ? 44 108 233

A) 14 B) 22 C) 17 D) 25 E) None

6.10 15 15 ? 9.375 6.5625

A) 11.5 B) 12.5 C) 15 D) 13.5 E) None

7.540 558 ? 648 720 810

A) 636 B) 624 C) 569 D) 594 E) None

8.1 16 81 256 625 ?

A) 1310 B) 1163 C) 1296 D) 1245 E) None

9.1 3 4 8 15 27 ?

A) 50 B) 38 C) 45 D) 32 E) None

10.16 4 2 ? 1.75 1.875

A) 1.25 B) 1.8 C) 1.5 D) 1 E) None

Approximate Calculations

1. $7/8$ of 256 + $1(1/6)$ of 786 = ?

A.1100 B.2555 C.1000 D.1141 E.1150

2. $54(8/9) + 3(61/62) + 16(46/93) = ?$

A.70 B.75.36 C.62.3 D.54.25 E.66.67

3. $8^{3.2} * (64)^{4.4} * (56)^{2.5} * (343)^4 = 56^?$

A.10.5 B.16.3 C.14.5 D.11.11 E.13.4

4. $(9999 / 11) - (555 / 3) + (4096/8) = ?$

A.1110 B.2223 C.1554 D.990 E.1236

5. $1/4$ of 4096 - 17% of ? = 95

A.5464.70 B.5225.64 C.4882.15 D.3456.23
E.4220.3

6. $[(16.5 * 4) / 3 + 1444 / 3.8] = ? / 18$

A.9560 B.5885 C.7236 D.8550 E.6445

7. $? - 10^2 * 19 + 2660/5 = 1705/5$

A.1709 B.2200 C.1550 D.1987 E.1100

8. $(36)^2 / 216^{1/3} - 198/4 = ?$

A.172.3 B.125.4 C.150 D.120.15 E.166.5

9. $(3738/42) * 41.23 + 3442.56 - ? = 3672/18$

A.5523.5 B.6908.3 C.4550.2 D.2556.6
E.7854.5

10. $? - [14^2 * 14 + 166]/8 = 1905/5$

A.17.25 B.23 C.11 D.15.1 E.13.5

NUMBER SERIES KEY

1.Option B

Solution:
 $*0.5+1, *1-1, *1.5+1, *2-1, *2.5+1$
 $(11*1.5)+1 = 17.5.$

2.Option C

Solution:
 $5 \dots 9 \dots 19 \dots 41 \dots 81 \dots 145$
 $\cdot 4 \dots 10 \dots 22 \dots 40 \dots 64$
 $\cdot 6 \dots 12 \dots 18 \dots 24.$

3.Option A

Solution:
 $*8+1, *7+2, *6+3, *5+4, *4+5$
 $(65*6)+3=393.$

4.Option D

Solution:
 $\cdot 243/3=81 \quad 81/3=27 \quad 27/3=9$
 $243 \dots 5 \dots 81 \dots 15 \dots 27 \dots 45 \dots 9 \dots 135$
 $\cdot 5*3=15 \quad 15*3=45 \quad 45*3=135.$

5.Option C

Solution:
 $+1^3, +2^3, +3^3, +4^3, +5^3$
 $9+2^3 = 9+8=17.$

6.Option B

Solution:
 $*3/2, *4/4, *5/6, *6/8, *7/10$
 $(15*5)/6=12.5.$

7.Option D

Solution:
 $18*1, 18*2, 18*3, 18*4, 18*5$
 $558+36(18*2)= 594.$

8.Option C

Solution:
 $1^2 \dots 4^2 \dots 9^2 \dots 16^2 \dots 25^2$
 $\cdot 3 \dots 5 \dots 7 \dots 9$
 $36^2=1296.$

9.Option A

Solution:
 $1+3+4=8$
 $3+4+8=15$
 $4+8+15=27$
 $8+15+27=50.$

10.Option C

Solution:
 $*0.25, *0.5, *0.75, *1, *1.25$
 $2*0.75=1.5.$

Approximate Calculations KEY

1.Option D

$7/8 \text{ of } 256 + 1(1/6) \text{ of } 786 = ?$
 $\Rightarrow 224 + 917 = ?$
 $\Rightarrow 1141$

2. Option B

$54(8/9) + 3(61/62) + 16(46/93) = ?$
 $\Rightarrow 54.89 + 3.98 + 16.49$
 $\Rightarrow 75.36(\text{approx.})$

3. Option C

$8^{3.2} * (64)^{4.4} * (56)^{2.5} * (343)^4 = 56^?$
 $\Rightarrow 8^{3.2} * 8^{(2*4.4)} * (8*7)^{2.5} * (7^3)^4 = 56^?$
 $\Rightarrow 8^{(3.2 + 8.8 + 2.5)} * 7^{(2.5 + 12)} = 56^?$
 $\Rightarrow 56^{14.5} = 56^?$
 $\Rightarrow ? = 14.5$

4. Option E

$(9999 / 11) - (555 / 3) + (4096/8) = ?$
 $\Rightarrow 909 - 185 + 512 = ?$
 $\Rightarrow ? = 1236$

5. Option A

$1/4 \text{ of } 4096 - 17\% \text{ of } ? = 95$
 $\Rightarrow 1024 - 17\% \text{ of } ? = 95$
 $\Rightarrow (929 * 100) / 17 = ?$
 $\Rightarrow ? = 5464.70$

6. Option C

$[(16.5 * 4) / 3 + 1444 / 3.8] = ? / 18$
 $\Rightarrow 22 + 380 = ? / 18$
 $\Rightarrow 402*18 = ?$
 $\Rightarrow ? = 7236$

7. Option A

$? - 10^{2*} 19 + 2660/5 = 1705/5$
 $\Rightarrow ? - 1368 = 341$
 $\Rightarrow ? = 341+1368 = 1709$

8. Option E

$(36)^2 / (216)^{1/3} - 198/4 = ?$
 $\Rightarrow 1296/6 - 49.5 = ? \Rightarrow 216 - 49.5 = 166.5$

9. Option B

$(3738/42) * 41.23 + 3442.56 - ? = 3672/18$
 $\Rightarrow 89 * 41.23 + 3442.56 - ? = 204$
 $\Rightarrow 3669.47 + 3442.56 - ? = 204$
 $\Rightarrow 7112.03 - 204 = ?$
 $\Rightarrow ? = 6908.03$

10. Option A

$? - [14^2 * 14 + 166] / 8 = 1905/5$
 $\Rightarrow ? - 363.75 = 381$
 $\Rightarrow ? = 381+363.75 = 744.75$