

NUMBER SERIES

1.346, 345, 337, 310, 246, ?

A) 135 B) 117 C) 121 D) 102 E) 146

2.7.5, 9, 13.5, 27, 67.5, ?

A) 149 B) 197 C) 165 D) 138 E) 189

3.4, 2.5, 3.5, 9, 40, ?

A) 316 B) 328 C) 288 D) 314 E) 386

4.4.5, 3.5, 6, 17, 67, ?

A) 263 B) 334 C) 254 D) 354 E) 318

5.159, 79, 39, 19, ?, 4

A) 11 B) 12 C) 8 D) 9 E) 7

6.2, 10, 30, ?, 130, 222

A) 60 B) 72 C) 68 D) 55 E) None

7.24, 12, 12, ?, 96, 768

A) 32 B) 24 C) 28 D) 35 E) None

8.5, 6, 14, 45, ?, 925

A) 160 B) 154 C) 145 D) 184 E) None

9.195, 167, 141, 117, 95, ?, 57

A) 82 B) 75 C) 66 D) 59 E) None

10.56, 58, 62, 70, 86, ?, 182

A) 166 B) 142 C) 118 D) 135 E) None

Approximate Calculations

1. $(4443.95 / 40.01) + (644.86 / 24.99) + (399 / 39.85) = ?$

A. 147 B. 152 C. 135 D. 153 E. None

2. $[(15.9 / 80.01) / (1025.01 - 514.75) / 169.65] = ? / 29.68$

A. 6 B. 4 C. 5 D. 2 E. None

3. $(16.01 * 31.75) / (8.99 * 27.01 * 80.95) = ?$

A. $(2/3)^{12}$ B. $(2/3)^9$ C. $(2/3)^6$ D. $(2/3)^{10}$ E. None

4. $89.99 + 280.01 / 3.9 - 144.65 = \sqrt{?}$

A. 441 B. 289 C. 225 D. 169 E. None

5. 80.10% of 179.99 + 44.65% of 30.01 = ?

A. 142 B. 139 C. 158 D. 136 E. None

6. $44.55 + 62.85 - 32.01 + 59.88 - 21.5 = ?$

A. 98 B. 114 C. 106 D. 117 E. None

7. $(2914.01 / 31.1) / (1.99 / 3.01) * 510.01 / 169.99 = ?$

A. 423 B. 441 C. 386 D. 364 E. None

8. $\sqrt{1087.86 + 4.02^2} = ? + \sqrt{1024.03}$

A. 28 B. 36 C. 44 D. 17 E. None

9. 35.22% of 739.82 + ? = $(125\%$ of 13.02)²

A. -3 B. +3 C. -6 D. +6 E. None

10. $90.05 + 281/4 - 151.06 = \sqrt[3]{?}$

A. 216 B. 512 C. 729 D. 64 E. NONE

NUMBER SERIES KEY

1. Option C

Pattern:

...-1.....-8.....-27.....-64.....-125

2.Option E

Pattern:

$$7.5 + 1.5 = 9$$

$$9 + 4.5 = 13.5$$

$$13.5 + 13.5 = 27$$

$$27 + 40.5 = 67.5$$

$$67.5 + 121.5 = 189$$

3. Option B

Pattern:

$$*0.5 + 0.5, *1 + 1, *2 + 2, *4 + 4, *8 + 8$$

4. Option B

Pattern:

$$*1 - 1, *2 - 1, *3 - 1, *4 - 1, *5 - 1$$

5.Option D

Pattern:

$$*0.5 - 0.5, *0.5 - 0.5, *0.5 - 0.5, *0.5 - 0.5, *0.5 - 0.5$$

6.Option C

Solution:

$$1^3+1=2,$$

$$2^3+2=10,$$

$$3^3+3=30,$$

$$4^3+4=68,$$

$$5^3+ 5=130,$$

$$6^3+ +6=222.$$

7.Option B

Solution:

$$24*0.5=12,$$

$$12*1=12,$$

$$12*2=24,$$

$$24*4=96,$$

$$96*8=768.$$

8.Option D

Solution:

$$5*1+1=6,$$

$$6*2+2=14,$$

$$14*3+3=45,$$

$$45*4+4=184,$$

$$184*5+5=925.$$

9.Option B

Solution:

$$14^2 - 1 = 195,$$

$$13^2 - 2 = 167,$$

$$12^2 - 3 = 141,$$

$$11^2 - 4 = 117,$$

$$10^2 - 5 = 95,$$

$$9^2 - 6 = 75,$$

$$8^2 - 7 = 57.$$

10.Option C

Solution:

$$56 + 2^1 = 58,$$

$$58 + 2^2 = 62,$$

$$62 + 2^3 = 70,$$

$$70 + 2^4 = 86,$$

$$86 + 2^5 = 118,$$

$$118 + 2^6 = 182.$$

Approximate Calculations KEY

1.Option A

Solution:

$$(4444/40) + (645/25) + (400/40) = x$$

$$111.1 + 25.8 + 10 = x$$

$$x = 146.9 = 147.$$

2. Option D

Solution:

$$[(16/80)/(1025-515)/170] = x/30$$

$$16/80 * 170/510 = x/30$$

$$1/15 = x/30$$

$$x = 2.$$

3.Option B

Solution:

$$(16*32) / (9*27*81) = x$$

$$(2^4 * 2^5) / (3^2 * 3^3 * 3^4) = x$$

$$(2^9) / (3^9) = x$$

$$x = (2/3)^9.$$

4.Option C

Solution:

$$90 + 280/4 - 145 = \sqrt{x}$$

$$90 + 70 - 145 = \sqrt{x}$$

$$\sqrt{x}=15$$

$$x=225.$$

5.Option C

Solution:

$$80\% \text{ of } 180 + 45\% \text{ of } 30=x$$

$$144+13.5=x$$

$$x=157.5=158.$$

6.Option B

Solution:

$$45+63-32+60-22=x$$

$$168-54=x$$

$$x=114.$$

7.Option A

Solution:

$$(2914/31) * (3/2) * (510/170)=x$$

$$47*3*3=x$$

$$x=423.$$

8.Option D

Solution:

$$\sqrt{1088 + 4^2} = x + \sqrt{1024}$$

$$33+16-32=x$$

$$x=17.$$

9.Option A

Solution:

$$35\% \text{ of } 740 + x = (125\% \text{ of } 13)^2$$

$$259 + x = 16 < \sup > 2$$

$$x = 256 - 259$$

$$= -3.$$

10.Option C

Solution:

$$90 + 70 - 151 = \sqrt[3]{x}$$

$$160 - 151 = \sqrt[3]{x}$$

$$\sqrt[3]{x} = 9$$

$$x = 729.$$