Explore | Expand | Enrich

ADDITION AND SUBTRACTION OF BIGGER NUMBERS

Question: 01

Evaluate: 57432 + 2346 + 785 + 34 = ?

A. 60789
B. 60597
C. 60957
D. 60798

Answer: B

Explanation:

1st step: 2+6+5+4=[1]7 => digit of the sum of unit= 7

2nd step: 3+4+8+3+[1]=[1]9=digit of the sum of tenth=9

3rd step:4+3+7+[1]=[1]5=>digit of the sum of hundred=5

4th step:7+2+[1]=[1]0=>digit of the sum of thousand=0

5th step:5+[1]=6=>digit of sum of tenth thousand = 6

ANS:60597

Question: 02

Evaluate: 75653 - 43264 + 3246 - 7535 + 78 = ?

A. 28168
B. 28158
C. 28178
D. 28166

Answer: C

Explanation:

Basis = [7] [5] [6] [5] [3]

1st step: (-4+6-5+8)=5 =>[3]+5=8

Digit of unit of expression=8

2nd step: (-6+4-3+7)=2 =>[5]+2=7

Digit of tenth of expression=7

3rd step: (-2+2-5)=-5=>[6]-5=1

Digit of hundred of expression=1

4th step:(-3+3-7)= -7=>15-7=8

Digit of thousand of expression=8

Digit of ten thousand expressions=6-4=2

sum= 28178

Question: 03

Evaluate: 57543 - 2346 + ? = 85432

A. 30235
B. 31235
C. 30245
D. 31245

Answer: A

Explanation:

Base = [8] [5] [4] [3] [2]

1st step: -3+6=3=>[2] -3=5

Digit of unit of expression = 5

2nd step:-4+4=0=>[3]+0=3

Digit of tenth of expression = 3

3rd step: -5+3= -2 =>[4]-2=2

Digit of hundred of expression= 2

4th step:-7+2=-5=>[5]-5=0

Digit of thousand of expression=0

5th step:[8]-5=3

ANS:30235

Question: 04

Evaluate: 94532 -6754 -? = 75432 - 2346

A. 14682
B. 14672
C. 14692
D. 14662

Answer: C

Explanation:

Base= 8 13 14 13

[9][4][5][3][2]

1st step: -4-2+6=0=>[2]+0=2

2nd step: -5-3+4= -4=>13-4=9

3rd step: -7-4+3=-8=>14-8=6

4th step: -6-5+2=-9=>13-9=4

5th step: 8-7=1

Ans: 14692

Question: 05

Evaluate: 6666 + 666 + 66 + 6 = ?

A. 7202
B. 7204
C. 7402
D. 7404

Answer: D

Explanation:

1st step: 4*6=[2]4 =>digit of units=4

2nd step: 3*6+[2]=[2]0 =>digit of the tenth = 0

3rd: 2*6+ [2] =[1]4 =>digit of hundred= 4

4th step: 1*6 +[1] =7=>digit of thousand= 7

Ans: 7404

Question: 06

Evaluate: 0.9999 + 0.999 + 0.99 + 0.9 = ?

A. 3.8889
B. 3.8879
C. 3.8869
D. 3.8859

Answer: A

Explanation:

1st step: 9*1=9 =>digit of the unit of sum = 9

2nd step: 9*2=[1] 8 =>digit of the tenth= 8

3rd step: 9*3+[1]=[2]8=>digit of the hundred=8

4th step:9*4+[2]=[3]8 => digit of thousand=8

5th step: digit of ten thousand= 3

Ans: 3.8889

Question: 07

Evaluate: 43.632 + 3.05 + 437.102 - 232.56 = ?

A. 261.224
B. 251.224
C. 251.226
D. 261.226

Answer: B

Explanation:

Base: [4] [3] [7] [1] [0] [2]

1st step: 2+0-0=2=>2+[2]=4

Digit of unt of sum= 4

2nd step: 3+5-6=2=>[0]+2=2

Digit of tenth of sum=2

3rd step: 6+0-5=1=>[1]+1=2

Digit of hundred= 2

4th step: 3+3-2=4=>[7]+4=[1]1

Digit of thousand=1

5th step: 4-3=1=>[3]+[3]+1=5=> digit of ten thousand= 5

6th step: 4-2=2

Ans: 251.224

Question: 08

Determine the value for:

$$27\frac{1}{2} + 15\frac{3}{4} - 12\frac{2}{5} + 18\frac{4}{5} = ?$$

A. 993/20
B. 48/20
C. 49/20
D. 994/20

Answer: A

Explanation:

Example: $27\frac{1}{2}+15\frac{3}{4}-12\frac{2}{5}+18\frac{4}{5}=?$

Tricky Solution: $?=(27+15-12+18)+\left(\frac{1}{2}+\frac{3}{4}-\frac{2}{5}+\frac{4}{5}\right)$

$48+\frac{33}{20}=48+1+\frac{13}{20}=49\frac{13}{20}$ Ans

ANS: 993/20

Question: 09

Evaluate: $13\frac{3}{4} + 17\frac{2}{7} + 31\frac{1}{4} + 15\frac{5}{7} + 12\frac{2}{3} = ?$

A. 372/3
B. 272/3
C. 362/3
D. 262/3

Answer: B

Explanation:

Example: $13\frac{3}{4}+17\frac{2}{7}+31\frac{1}{4}+15\frac{5}{7}+12\frac{2}{3}=?$

Tricky Solution: $?=(13+17+31+15+12)+\left(\frac{3}{4}+\frac{1}{4}\right)\left(\frac{2}{7}+\frac{5}{7}\right)+\frac{2}{3}$

$88+1+1+\frac{2}{3}=90+\frac{2}{3}=90\frac{2}{3}$ .Ans

Ans: 272

Question: 10

Evaluate:

$$20\frac{7}{8} + 14\frac{1}{3} - 10\frac{5}{8} + 21\frac{3}{4} = ?$$

A. 139/3
B. 129/3
C. 128/3
D. 138/3

Answer: A

Explanation:

Example: $20\frac{7}{8} + 14\frac{1}{3} - 10\frac{5}{8} + 21\frac{3}{4} = ?$

Tricky Solution: $? = (20 + 14 - 10 + 21) + \left(\frac{7}{8} - \frac{5}{8} + \frac{3}{4}\right) + \frac{1}{3}$

$45 + \left(\frac{1}{4} + \frac{3}{4}\right) + \frac{1}{3} = 45 + 1 + \frac{1}{3} = 46\frac{1}{3}$ .Ans

Ans: 139/3

Question: 11

Evaluate:

$$15\frac{1}{3} - 9\frac{1}{4} + 18\frac{3}{4} - 12\frac{1}{2} + 1\frac{8}{10} = ?$$

A. 210/15
B. 212/15
C. 211/15
D. 208/15

Answer: B

Explanation:

Example: $15\frac{1}{3} - 9\frac{1}{4} + 18\frac{3}{4} - 12\frac{1}{2} + 1\frac{8}{10} = ?$

Tricky Solution: $? = (15 - 9 + 18 - 12 + 1) + \left(\frac{3}{4} - \frac{1}{4} - \frac{1}{2}\right) + \left(\frac{8}{10} - \frac{1}{3}\right)$

$= 13 + \left(\frac{3}{4} - \frac{3}{4}\right) + \left(\frac{4}{5} - \frac{1}{3}\right) = 13 + 0 + \frac{17}{15} = 13 + 1 + \frac{2}{15}$

$= 14 + \frac{2}{15} = 14\frac{2}{15}$ .Ans

Ans: 212/15

Question: 12

Evaluate:

$$9\frac{2}{3} - 23\frac{1}{2} - 16\frac{3}{4} + 35\frac{5}{6} = ?$$

A. 11/4
B. 12/4
C. 21/4
D. 22/4

Answer: C

Explanation:

Example: $9\frac{2}{3} - 23\frac{1}{2} - 16\frac{3}{4} + 35\frac{5}{6} = ?$

Tricky Solution: $? = (9 - 23 - 16 + 35) + \left(\frac{2}{3} - \frac{1}{2} - \frac{3}{4} + \frac{5}{6}\right)$

$= 5 + \left(\frac{8-6-9+10}{4}\right) = 5 + \frac{3}{12} = 5 + \frac{1}{4} = 5\frac{1}{4}$ .Ans

Ans: 21/4

Question: 13

Evaluate:

$$117\frac{2}{5} + 13\frac{1}{5} - 74\frac{2}{3} = ?$$

A. 836/15
B. 837/15
C. 838/15
D. 839/15

Answer: D

Explanation:

Example: $117\frac{2}{5} + 13\frac{1}{5} - 74\frac{2}{3} = ?$

Tricky Solution: $? = (117 + 13 - 74) + \left(\frac{2}{5} + \frac{1}{5} - \frac{2}{3}\right)$

$= 5 + \left(\frac{6+3-10}{15}\right) = 56 - \frac{1}{15}$

$= 55 + \left(1 - \frac{1}{15}\right)$

$= 55 + \frac{14}{15} = 55\frac{14}{15}$ .Ans

Question: 14

Evaluate:

$$\frac{1}{11} - \frac{2}{11} + \frac{3}{11} - \frac{4}{11} + \frac{5}{11}$$

A. 1/11
B. 2/11
C. 3/11
D. 4/11

Answer: C

Explanation:

1/11 – 2/11 + 3/11 – 4/11 + 5/11 = (1-2+3-4+5)/11 = 3/11

Question: 15

If ¼ of the ghosts in a castle are friendly and ⅗ of them are unfriendly. What fraction of the ghost are neither friendly nor unfriendly?

A. 3/20
B. 20/3
C. 1/20
D. 5/20

Answer: A

Explanation:

Friendly + unfriendly ghosts are ¼ +3/5 = 5/20 + 12/20 = 17/20

so neutral ghosts are 1 – 17/20 = (20-17)/20 = 3/20

THANK YOU