

SIMPLIFICATION MODERATE LEVEL QUESTIONS

Direction (1-10): What should come in place of the question mark (?) in the following questions?

1. 62.5% of $800 - 33.33\%$ of $960 = 125\%$ of ?

- a. 120
- b. 144
- c. 165
- d. 180
- e. None of these

2. $(2)^5 \times (3^2)^3 \div (64)^3 = (40 \div 10)^{?+1}$

- a. 3
- b. 4
- c. 5
- d. 6
- e. None of these

3. $\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{301 - \sqrt{168 - \sqrt{544 + \sqrt{1042 - \sqrt{324}}}}}}}}}} = ? \div 3$

- a. 25
- b. 51
- c. 39
- d. 34
- e. 65

4. $48.3 \times 289 \div 3.4 \div 23 \div 68 \times 21 = ?^3 + 28.125$

- a. 5
- b. 3

c. 8

d. 11

e. None of these

5. $(21^2 - 3^9) \times (3^6 - 9^3) + 11^2 = ?$

- a. 12251
- b. 17781
- c. 91641
- d. 72361

e. None of these

6. If $X = 10$, $Y = 7$, then

$$\frac{(X - Y)^4 - 18}{7} \times \frac{9XY}{10Y^2 - 6XY} = ?$$

- a. 44
- b. 113
- c. 66
- d. 81
- e. 69

7. $143^2 + 188^2 + 201^2 - 142^2 - 186^2 - 199^2 = ?$

- a. 1833
- b. 1783
- c. 1567
- d. 1098

8. $(6\sqrt{6} \times 2\sqrt{3} \times 4\sqrt{2}) \div 12 = ? + 123 - 59$

- a.-75
- b.-40
- c. -80
- d.60
- e.None of these

9. $88555/89 + 4925/985 - 3\sqrt{6859} + \sqrt{441} = ?$

- a. 1000
- b. 1001
- c. 1002
- d.1003
- e.None of these

10. $36\% \text{ of } 63621 + 63 * 89 - 532 * 95 + 4275/95 = ?$

- a. 21984.44
- b. 21884.44
- c. - 21984.44
- d.- 21884.44
- e.None of these

Direction (11-20): What should come in place of the question mark (?) in the following questions?

11. $3\sqrt{2197} * 594 - \sqrt{256} * 449 + 0.8\% \text{ of } 590 = ?$

- a.532.72
- b.552.72
- c.524.72
- d.542.72
- e.None of these

12. $\sqrt{11025/15} * 1968 + 12632 - 1262 * 23 = ?$

- a.- 2610

b.2610

c.-2618

d.- 2608

e.None of these

13. $526 * 24 + 224 * 28 - 198 * 23 - 608 = ?$

a.13734

b.13735

c.13634

d.13374

e.None of these

14. $(562 - 252) * 1/31 + ?\% \text{ of } 100 = 150 + (562 * 1.62)$

a.989.44

b.969.44

c.959.44

d.919.44

e.None of these

15. $(3380 * 46/52) + 384 - (1832 * 3/4) = ? + 3\sqrt{12167} * \sqrt{4761}$

a.413

b.423

c. 453

d.433

e.None of these

16. $1625 * 222 * 3.8 - 622256 = ? + 98\% \text{ of } 56558$

a.696267.16

b.695267.16

c.693167.16

d.698767.16

e.None of these

17. $9^6/27 * 2187/27^4 * 3^2 = 9/729 * 243/6561$

- a. 10
- b.- 10
- c.9
- d.- 12
- e.None of these

18. $\sqrt{6084} + \sqrt{2401} \times 8 - 144 + 658 = ?$

- a.984
- b.894
- c.948
- d.489
- e.none of these

19. Find the value of $1/(3 + 1/(3 + 1/(3 - 1/3)))$

- a.3/10
- b.10/3
- c.27/89
- d.89/27
- e. None of these

20. $\sqrt{10 + \sqrt{27 + \sqrt{65 + \sqrt{256}}}}$

- a.9
- b. 8
- c.6
- d.4
- e. None of these

Direction (21-25): What should come in place of the question mark (?) in the following questions?

21. $\sqrt{7396} \times 3375 = 225 \times ?$

- a. 1,250
- b. 1,290
- c. 1,270
- d. 1,300
- e. 1,232

22. $89\% \text{ of } 624 + 1220 - \sqrt{10404} - 1020 = ?$

- a.653.36
- b.663.36
- c.643.36
- d.673.36
- e.None of these

23. $(3.5 \times 3.5 \times 3.5 - 1.5 \times 1.5 \times 1.5) / (3.5 \times 3.5 + 1.5 \times 1.5 + 3 \times 3.5/2) = ?$

- a.0
- b.1
- c.3
- d.2
- e.None of these

24. $25/3 \times 22/5 + ? = 222/5$

- a.116/13
- b.116/15
- c.117/15
- d.116/13
- e.None of these

25. $1/7 + [7/9 - (3/2 + 2/9) - 2/9] = ?$



- a. - 43/42.
- b. 44/42.
- c.- 43/43.
- d.44/43.
- e.None of these

Direction (26-50): What approximate value should come in place of question mark (?) in the following questions?

26. $(251.87 \times 8 \times 6.99) \div 25 = 11.986 + ?$

- a. 448
- b. 586
- c. 568
- d. 548
- e. 652

27. $1 \frac{1}{16.99}$ of 50.988 + ?% of 5500 = $41.992^2 + 49.99$

- a. 64
- b. 82
- c. 32
- d. 52
- e. 62

28. $\sqrt{7378} \times \sqrt{1330} \div \sqrt{660} = ?$

- a.250
- b.320
- c.120
- d.420
- e.150

29. $6999 \div 70.005 \times 94.998 = ? \times 19.999$

- a.575
- b.675
- c.475
- d.375
- e.275

30. 125% of 4875 + $88.005 \times 14.995 = ?$

- a.7515
- b.7415
- c.7210
- d.7145
- e.7005

31. $\sqrt{1000} + \frac{3.001}{4.987}$ of 1891.992

- a.1166
- b.1530
- c.980
- d.685
- e.1130

32. $(?)^2 + (6.99)^3 = (19.99)^2 + (7.98)^2$

- a.11
- b.14
- c.13
- d.10

e. None of these

33. 84.789% of 479.983 – 26.01% of 349.98 – $3024.31 \div 35.998 = ?$

- a.255
- b.285
- c.295



d.235

e.205

34. $(5 * 7)\%$ of $(34 * 55) + 456.60 = 699.10 + ?$

a.510

b.610

c.410

d.310

e.210

35. 103.1% of $6401.01 - 3/7\%$ of $6300.12 + 11.999 = ?$

a.6597

b.6527

c.6777

d.5677

e.6577

36. 29.8% of $260 + 60.01\%$ of $510 - 103.57 = ?$

a. 480

b.380

c.280

d.180

e.580

37. $\sqrt{120} \times \sqrt{530} + \sqrt{1681} + \sqrt{5330} = ?$

a.327

b.227

c.367

d.267

e.427

38. 11.12% of $261 - 32.01 + 50.01\%$ of $3200 = ? /$

2.99

a.4761

b.4701

c.4791

d.4747

e.4737

39. $17.99^2 - 14.05^2 + (2343.75 + 81.55) \div ? = 229$

a.32

b.39

c.24

d.28

e.12

40. 36% of $545 + 32\%$ of $215 - 47\%$ of $1300 = ?$

a. 643

b. 346

c. -411

d. -346

e. -643

41. $\sqrt{6560} * 4.007 + 119.99 * 1.998 - 50.001\%$ of $479.908 = ?$

a. 348

b. 324

c. 368

d. 372

e. 396

42. 19.99% of $789.907 * 15.08 + 111.999 \div 4.034 -$

45% of $399.998 = ?$

a. 2220

b. 2290

c. 2190

- d. 1320
e. 2480

43. $699.989 \div 7.05 - 4.998 * 17.96 + 14.05 * 3.99 - 12.09 = ?$

- a. 54
b. 60
c. 48
d. 42
e. 64

44.

$[(5\sqrt{7} + \sqrt{7}) \times (4\sqrt{7} + 8\sqrt{7})] - (19)^2 = ?$

- a. 143
b. 134
c. 123
d. 134
e. 101

45. $5 \frac{2}{3}$ of 299.78 + 3 $\frac{1}{8}$ of 429.67 = ? % of 749.85

- a. 384
b. 360
c. 448
d. 412
e. 490

46. 26% of 349.75 – 32% of 599.27 = ? – $157.94 - (27.21)^2$

- a. 820
b. 568
c. 786
d. 634
e. 912

47. $(17.78)^2 + 23\%$ of 1299 – $(5/12)$ of 839 = ? – $(9.72)^3$

- a. 850
b. 1700
c. 1275
d. 2135
e. 2450

48. $34.99 * 3.04 + 80.03\%$ of 40.06 – $12.977 * 1.907 + ? = 45.06 * 3.009$

- a. 20
b. 28
c. 18
d. 24
e. 30

49. $22 \frac{1}{3}\%$ of 435.3 – $(11/7)\%$ of 1734.67 = ?

- a. 78
b. 69
c. 50
d. 59
e. 62

50. $13.689 * 17.213 + 21.864 * 8.79 = ?$

- a. 400
b. 380
c. 440
d. 460
e. None of these

Answer with Solution

Solution (1-10)

1. B

$$62.5\% \text{ of } 800 - 33.33\% \text{ of } 960 = 125\% \text{ of } x$$

$$125\% \text{ of } x = \frac{800}{8} \times 5 - \frac{960}{3}$$

$$125\% \text{ of } x = 500 - 320$$

$$x = 180 \times \frac{100}{125}$$

$$x = 144$$

2. A

$$(2)^5 \times (32)^3 \div (64)^2 = (40 \div 10)^{?+1}$$

$$(2)^5 \times (2)^{15} \div (2)^{12} = (4)^{?+1}$$

$$(2)^8 = (2)^{2x+2}$$

Base is same

$$8 = 2x+2$$

$$x = 3$$

3. B

$$\sqrt{301 - \sqrt{168 - \sqrt{544 + \sqrt{1042 - \sqrt{324}}}}} = ? + 3$$

$$\sqrt{301 - \sqrt{168 - \sqrt{544 + \sqrt{1042 - 18}}}} = ? + 3$$

$$\sqrt{301 - \sqrt{168 - \sqrt{544 + \sqrt{1024}}}} = ? + 3$$

$$\sqrt{301 - \sqrt{168 - \sqrt{544 + 32}}} = ? + 3$$

$$\sqrt{301 - \sqrt{168 - \sqrt{544 + 32}}} = ? + 3$$

$$\sqrt{301 - \sqrt{168 - \sqrt{576}}} = ? + 3$$

$$\sqrt{301 - \sqrt{168 - 24}} = ? + 3$$

$$\sqrt{301 - \sqrt{144}} = ? + 3$$

$$\sqrt{301 - 12} = ? + 3$$

$$\sqrt{289} = ? + 3$$

$$\text{or, } 17 = ? + 3 \text{ or, } ? = 14$$

4. B

$$48.3 \times 289 \div 3.4 \div 23 \div 68 \times 21 = ?^3 + 28.125$$

$$483 \times 289 \div 34 \div 23 \div 68 \times 21 = ? + 28.125$$

$$441/8 = ?^3 + 28.125$$

$$55.125 - 28.125 = ?^3$$

$$?^3 = 27$$

$$? = 3$$

5. E

$$? = (21^2 - 3^9) \times (729 - 729) + 121$$

$$? = 121 + 0 = 121$$

6. D

$$\Rightarrow \frac{(X - Y)^4 - 18}{7} \times \frac{9XY}{10Y^2 - 6XY} = ?$$

$$\Rightarrow \frac{81 - 18}{7} \times \frac{9 \times 10}{10 \times 7 - 6 \times 10}$$

$$\Rightarrow \frac{63}{7} \times \frac{9 \times 10}{10 \times 7 - 6 \times 10}$$

$$\Rightarrow 9 \times \frac{90}{10}$$

$$\Rightarrow 81$$

7. A

$$143^2 + 188^2 + 201^2 - 142^2 - 186^2 - 199^2$$

$$= (143^2 - 142^2) + (188^2 - 186^2) + (201^2 - 199^2)$$

Using $a^2 - b^2 = (a+b)(a-b)$, we have:

$$(143 + 142)(143 - 142) + (188 + 186)(188 - 186) + (201$$

$$\begin{aligned}
 &+ 199)(201 - 199) \\
 &= 285 \times 1 + 374 \times 2 + 400 \times 2 \\
 &= 1833
 \end{aligned}$$

8. B

$$\frac{6\sqrt{6} \times 2\sqrt{3} \times 4\sqrt{2}}{12} = ? + 123 - 59$$

$$? + 64 = \frac{6\sqrt{6} \times 2\sqrt{3} \times 4\sqrt{2}}{12}$$

$$? + 64 = \frac{6 \times 6 \times 2 \times 4}{12}$$

$$? + 64 = 24$$

$$? = 24 - 64$$

$$? = -40$$

9. C

$$88555/89 + 4925/985 - 3\sqrt{6859} + \sqrt{441} = ?$$

$$? = 995 + 5 - 19 + 21$$

$$? = 1002$$

10. C

$$36 \% \text{ of } 63621 + 63 * 89 - 532 * 95 + 4275/95 = ?$$

$$? = 22903.56 + 5607 - 50540 + 45$$

$$? = -21984.44$$

Solution (11-20)

11. D

$$3\sqrt{2197} * 594 - \sqrt{256} * 449 + 0.8 \% \text{ of } 590 = ?$$

$$? = 13 * 594 - 16 * 449 + 4.72$$

$$? = 7722 - 7184 + 4.72$$

$$? = 542.72$$

12. C

$$\sqrt{11025/15} * 1968 + 12632 - 1262 * 23 = ?$$

$$? = 105/15 * 1968 + 12632 - 1262 * 23$$

$$? = 13776 + 12632 - 29026$$

$$? = -2618$$

13. A

$$526 * 24 + 224 * 28 - 198 * 23 - 608 = ?$$

$$? = 12624 + 6272 - 4554 - 608$$

$$? = 13734$$

14. E

$$(56^2 - 25^2) * 1/31 + ? \% \text{ of } 100 = 150 + (562 * 1.62)$$

$$(56 - 25) (56 + 25) * 1/31 + (? / 100) * 100 = 150 + 910.44$$

$$81 + (?) = 1060.44$$

$$? = 1060.44 - 81$$

$$? = 979.44$$

15. A

$$(3380 * 46/52) + 384 - (1832 * 3/4) = ? + 3\sqrt{12167} * \sqrt{4761}$$

$$? + 23 * 69 = 65 * 46 + 384 - 458 * 3$$

$$? = 2990 + 384 - 1374 - 1587$$

$$? = 3374 - 2961$$

$$? = 413$$

16. C

$$1625 * 222 * 3.8 - 622256 = ? + 98 \% \text{ of } 56558$$

$$? = 360750 * 3.8 - 622256 - 55426.84$$

$$? = 748594 - 55426.84$$

$$? = 693167.16$$

17. E

$$9^6/27 * 2187/27^4 * 3^? = 9/729 * 243/6561$$

$$81 * 3^? = 1/2187$$

$$34 * 3^? = 1/37$$

$$4 + ? = -7$$

$$? = -7 - 4$$

$$? = -11$$

18. A

$$\sqrt{6084} + \sqrt{2401} \times 8 - 144 + 658 = ?$$

$$\Rightarrow 78 + 49 \times 8 - 144 + 658 = ?$$

$$\Rightarrow 78 + 392 - 144 + 658 = ?$$

$$\Rightarrow 1128 - 144 = ?$$

$$\Rightarrow 984 = ?$$

19. C

$$1/[3 + (1/(3 + 1/(3 - 1/3)))]$$

$$= 1/[3 + 1/(3 + 1/(8/3))]$$

$$= 1/[3 + 1/(3 + 3/8)]$$

$$= 1/[3 + 1/(27/8)]$$

$$= 1/[3 + 8/27]$$

$$= 1/(89/27)$$

$$= 27/89$$

20. D

$$\sqrt{10 + \sqrt{27 + \sqrt{65 + \sqrt{256}}}}$$

$$\sqrt{10 + \sqrt{27 + \sqrt{65 + 16}}}$$

$$\sqrt{10 + \sqrt{27 + \sqrt{81}}}$$

$$\sqrt{10 + \sqrt{27 + 9}}$$

$$\sqrt{10 + \sqrt{36}}$$

$$\sqrt{10 + 6} = \sqrt{16} = 4$$

Solution (21-25)

21. B

$$? = \frac{86 \times 3375}{225}$$

$$= 1290$$

22. A

$$89\% \text{ of } 624 + 1220 - \sqrt{10404} - 1020 = ?$$

$$? = 555.36 + 1220 - 102 - 1020$$

$$? = 653.36$$

23. D

$$(3.5 \times 3.5 \times 3.5 - 1.5 \times 1.5 \times 1.5) / (3.5 \times 3.5 + 1.5 \times 1.5 + 3 \times 3.5/2) = ?$$

$$\Rightarrow ? = [(3.5)^3 - (1.5)^3] / [(3.5)^2 + (1.5)^2 + 5.25]$$

$$\Rightarrow ? = (3.5 - 1.5) \{ (3.5)^2 + (1.5)^2 + 5.25 \} / [(3.5)^2 + (1.5)^2 + 5.25]$$

$$= 2.0$$

24. B

$$25/3 \times 22/5 + ? = 222/5$$

$$\Rightarrow 550/15 + ? = 222/5$$

$$\Rightarrow ? = (222/5) - (550/15)$$

$$= (666 - 550)/15$$

$$? = 116/15$$

25. A

$$1/7 + [7/9 - (3/2 + 2/9) - 2/9] = ?$$

$$\Rightarrow ? = 1/7 + [7/9 - (3/2 + 2/9) - 2/9]$$

$$\Rightarrow ? = 1/7 + [7/9 - 31/18 - 2/9]$$

$$\Rightarrow ? = 1/7 + (14 - 31 - 4)/18$$

$$\Rightarrow ? = 1/7 - 21/18$$

$$\Rightarrow ? = 1/7 - 7/6$$

$$\Rightarrow ? = (6 - 49)/42$$

$$? = -43/42.$$

Solution (21-50)

26. D

$$11.986 + ? = (251.87 \times 8 \times 6.99) \div 25$$

$$\Rightarrow 12 + ? \approx (252 \times 8 \times 7) \div 25$$

$$\Rightarrow 12 + ? = (10.08 \times 8 \times 7)$$

$$\Rightarrow 12 + ? \approx 560$$

$$? = 560 - 12 = 548$$

27. C

$$1 \frac{1}{16.99} \text{ of } 50.988 + ?\% \text{ of } 5500 = 41.992^2 + 49.99$$

$$1 \frac{1}{17} \text{ of } 51 + ?\% \text{ of } 5500 \approx 42^2 + 50$$

$$18 \times \frac{51}{17} + ?\% \text{ of } 5500 \approx 1764 + 50$$

$$54 + ?\% \text{ of } 5500 = 1814$$

$$?\% \text{ of } 5500 = 1814 - 54 = 1760$$

$$? = 100 \times \frac{1760}{5500} = 32$$

28. C

$$\sqrt{7378} \approx 86; \sqrt{1330} \approx 36; \sqrt{660} \approx 26$$

$$\sqrt{7378} \times \sqrt{1330} \div \sqrt{660} = ?$$

$$\Rightarrow 86 \times 36 \div 26 = 120$$

29. C

$$7000 \div 70 \times 95 = ? \times 20$$

$$\approx 475$$

30. B

$$125\% \text{ of } 4875 + 88.005 \times 14.995 = ?$$

Taking approximate value of each term,

$$\Rightarrow ? = 125/100 \times 4875 + 88 \times 15$$

$$\Rightarrow ? = 6093.75 + 1320$$

$$\Rightarrow ? \approx 6094 + 1320 = 7414 \approx 7415$$

31. A

$$\sqrt{1000} + \frac{3.001}{4.987} \text{ of } 1891.992 = ?$$

$$\Rightarrow ? \approx 31 + \frac{3}{5} \times 1892 = 31 + 1135.2$$

$$\Rightarrow ? = 1166$$

32. A

$$(?)^2 + (6.99)^3 = (19.99)^2 + (7.98)^2$$

$$(?)^2 = (19.99)^2 + (7.98)^2 - (6.99)^3$$

$$(?)^2 \approx 400 + 64 - 343$$

$$(?)^2 \approx 121$$

$$? \approx 11$$

33. D

$$? = 84.789\% \text{ of } 479.983 - 26.01\% \text{ of } 349.98 - 3024.31$$

$$\div 35.998$$

$$? \approx 85\% \text{ of } 480 - 26\% \text{ of } 350 - 3024 \div 36$$

$$? = 408 - 91 - 84$$

$$? = 233 \approx 235$$

34. C

$$(5 * 7)\% \text{ of } (34 * 55) + 456.60 = 699.10 + ?$$

$$\Rightarrow [(34*55*5*7)/100] + 456.60 = 699.10 + ?$$

$$\Rightarrow 1111.1 = 699.1 + ?$$

$$\Rightarrow ? = 1111.1 - 699.1$$

$$? = 412 \approx 410$$

35. E

$$? \approx \frac{6400 \times 103}{100} - 6300 \times \frac{3}{700} + 12$$

$$\approx 6592 - 27 + 12 = 6557$$

36. C

$$29.8\% \text{ of } 260 + 60.01\% \text{ of } 510 - 103.57 = ?$$

$$30\% \text{ of } 260 + 60\% \text{ of } 510 - 104 \approx ?$$

$$\Rightarrow 30/100 \times 260 + 60/100 \times 510 - 104 = ?$$

$$\Rightarrow 78 + 306 - 104 = ?$$

$$\Rightarrow ? = 384 - 104 = 280.$$

37. C

$$\sqrt{120} \times \sqrt{530} + \sqrt{1680} + \sqrt{5330} = ?$$

$$\Rightarrow \sqrt{120} \approx \sqrt{121} = 11$$

$$\Rightarrow \sqrt{530} \approx \sqrt{529} = 23$$

$$\Rightarrow \sqrt{1680} \approx \sqrt{1681} = 41$$

$$\Rightarrow \sqrt{5330} \approx \sqrt{5329} = 73$$

Then,

$$11 \times 23 + 41 + 73 = 253 + 41 + 73 = 367$$

38. C

$$11.12\% \text{ of } 261 - 32.01 + 50.01\% \text{ of } 3200 = ? / 2.99$$

$$11.12\% \text{ of } 261 = 1/9 * 261 = 29$$

$$50.01\% \text{ of } 3200 = 1600$$

$$29 - 32 + 1600 = ?/3$$

$$? = 1597 * 3 = 4791$$

39. C

$$17.99^2 - 14.05^2 + (2343.75 + 81.55) \div ? = 229$$

$$\approx 18^2 - 14^2 + (2344 + 82) \div ? = 229$$

$$= 324 - 196 + 2426/? = 229$$

$$= 128 + 2426/? = 229$$

$$= 2426/? = 101$$

$$\Rightarrow ? = 2426/101 = 24(\text{approx})$$

40. D

$$\begin{aligned} ? &= \frac{36}{100} \times 545 + \frac{32}{100} \times 215 - \frac{47}{100} \times 1300 \\ &= 196.2 + 68.8 - 611 \\ &= -346 \end{aligned}$$

41. B

$$\sqrt{6560} * 4.007 + 119.99 * 1.998 - 50.001\% \text{ of } 479.908 = ?$$

$$81 * 4 + 120 * 2 - 240 = ?$$

$$324 = ?$$

42. A

$$?*5 + 444.99 * 5.99 + 899.906 + 9.999 = 4579.99$$

$$?*5 + 445 * 6 + 900 + 10 = 4580$$

$$?*5 = 1000$$

$$? = 200$$

43. A

$$699.989 \div 7.05 - 4.998 * 17.96 + 14.05 * 3.99 - 12.09 = ?$$

$$700 \div 7 - 5 * 18 + 14 * 4 - 12 = ?$$

$$100 - 90 + 56 - 12 = ?$$

$$54 = ?$$

44. A

$$\begin{aligned} ? &= 6\sqrt{7} \times 12\sqrt{7} - 361 \\ &= 504 - 361 \\ &= 143 \end{aligned}$$

45. D

$$6 \text{ of } 300 + 3 \text{ of } 430 = x\% \text{ of } 750$$

$$(300 \times 6) + (3 \times 430) = (x/100) \times 750$$

$$1800 + 1290 = 15x/2$$

$$(3090 \times 2)/15 = x$$

$$X = 412.$$

46. C

$$26\% \text{ of } 350 - 32\% \text{ of } 600 = x - 158 - 272$$

$$(26/100) \times 350 - (32/100) \times 600 = x - 158 - 272$$

$$91 - 192 + 158 + 272 = x$$

$$X = 786$$

47. C

$$(18)^2 + 23\% \text{ of } 1300 - (5/12) \text{ of } 840 = x - (10)^3$$

$$324 + (23/100) \times 1300 - (5/12) \times 840 = x - 1000$$

$$324 + 299 - 350 + 1000 = x$$

$$X = 1273 = 1275$$

48. D

$$34.99 \times 3.04 + 80.03\% \text{ of } 40.06 - 12.977 \times 1.907 + ?$$

$$= 45.06 \times 3.009$$

$$35 \times 3 + 80/100 \times 40 - 13 \times 2 + ? = 45 \times 3$$

$$105 + 32 - 26 + ? = 135$$

$$? = 24$$

49. B

$$? = (67/3) \times (435/100) - (11/7) \times (1735/100) \approx (97-27)$$

$$= 70 \approx 69$$

50. C

$$? = 14 \times 17 + 22 \times 9 = 238 + 198 = 436 = 440$$