

## Expected Simplification Questions PDF for Bank PO/ Clerk Prelims Exam

**Directions (Q. 1 - 50):** What value should come in the place of question mark (?) in the following questions?

**1) 124 % of 3250 + (3/8) of 5712 = (?)<sup>2</sup> + 243**

- a) 83
- b) 73
- c) 77
- d) 87
- e) None of these

**2) ? % of 600 = 3285 - (44<sup>2</sup> - 19<sup>2</sup>) × 19 ÷ 399**

- a) 535
- b) 610
- c) 475
- d) 650
- e) None of these

**3) 72 × 6 × (125 - 97) + 1254 ÷ 3 ÷ 11 - 66<sup>2</sup> = ?**

- a) 6152
- b) 6524
- c) 7196
- d) 7778
- e) None of these

**4)  $\sqrt[3]{13824} + \sqrt[3]{74088}$  % of 250 -  $\sqrt[3]{3375}$  % of 600 = ?**

- a) 15
- b) 9
- c) 21
- d) 18
- e) None of these

**5) (5/17) of (408/55) of (165/240) of 6000 = 25 % of ?**

- a) 36000
- b) 32000
- c) 45000
- d) 41000
- e) None of these

**6)  $\sqrt{[(1573 \div 13) \times (275 \div 55) + 5^3 - 1]} = 1672 \div 11 - ?^3$**

- a) 8
- b) 6
- c) 5
- d) 7
- e) None of these

**7)  $8 \frac{4}{7} + 9 \frac{3}{4} - 3 \frac{5}{8} - ? = 6 \frac{29}{56}$**

- a)  $8 \frac{5}{28}$
- b)  $6 \frac{13}{25}$
- c)  $7 \frac{19}{28}$
- d)  $5 \frac{3}{4}$
- e) None of these

**8)  $(42^2 - 18^2) \times 24 \div 128 + ?$  % of 1800 = 1080**

- a) 60
- b) 75
- c) 45
- d) 50
- e) None of these

**9)  $(7 \times 7)^4 \div (343 \div 7)^2 \times (343 \times 7)^3 = (7)^{?+5}$**

- a) 11
- b) 9
- c) 13
- d) 7
- e) None of these

**10) 114 % of 1250 + (4/7) of 5712 = (?)<sup>2</sup> + 65**

- a) 84
- b) 96
- c) 72
- d) 68
- e) None of these

**11)  $(28 \times 9 + 54 \times 3 + 12 \times 11) \div (14^2 - \sqrt{961} + 17) = ?$**

- a) 6
- b) 3
- c) 5
- d) 8

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e) 7

12)  $(3/7)$  of  $245 \times 135 \div 15 - ? = 528 \div 3 + 217$

- a) 624
- b) 552
- c) 786
- d) 678
- e) 580

13)  $465 \times 7 + 12.5\%$  of  $658 + 876.75 = ?$

- a) 4214
- b) 4894
- c) 4564
- d) 4874
- e) None of these

14)  $(550\%$  of  $250) \div 275 + 45\%$  of  $780 = ?$

- a) 476
- b) 396
- c) 486
- d) 356
- e) None of these

15)  $378.35 + 478 \div 12.5 + 456.41 = ?$

- a) 873
- b) 882
- c) 793
- d) 763
- e) None of these

16)  $\sqrt{571536} \div 42 \times ? = 5850 + 126$

- a) 222
- b) 336
- c) 376
- d) 332
- e) None of these

17)  $(5926 - 6729 + 7498 - 3719 - 2937) \times \sqrt{11449} = ?$

- a) 4173
- b) 3973
- c) 5173

d) 6183

e) None of these

18)  $0.3 + 3.3 + 33.33 + 333.333 + 3.73 + 33.007 = ?$

- a) 408
- b) 409
- c) 407
- d) 405
- e) None of these

19)  $\sqrt{625} \times \sqrt{6241} - 768 \times 3 + \sqrt{15129} + 106 \times 2 = ?$

- a) 10
- b) 16
- c) 9
- d) 6
- e) None of these

20)  $37.5\%$  of  $80\%$  of  $730 + 160\%$  of  $250 - ? = 120\%$  of  $400$

- a) 129
- b) 139
- c) 149
- d) 159
- e) None of these

21)  $8^7 \times 2^6 \div 8^{2.4} \times 8^{1.4} = 8^?$

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

22)  $23 \times 15 - 60 + (? \div 31) = 292$

- a) 220
- b) 217
- c) 218
- d) 186
- e) 229

23)  $3 \frac{3}{4} + 4 \frac{2}{5} - 3 \frac{1}{8} + 6 \frac{2}{5} = ?$

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- a) 11 17/40
- b) 9 17/40
- c) 10 17/40
- d) 13 17/40
- e) None of these

24)  $\sqrt{841} \times 3 + 120\% \text{ of } 450 - 180\% \text{ of } 780 + 60\% \text{ of } 1800 = ?$

- a) 303
- b) 310
- c) 308
- d) 290
- e) None of these

25)  $25\% \text{ of } 780 + \sqrt{3249} \times 12 + 865 = ?$

- a) 1844
- b) 1644
- c) 1744
- d) 1455
- e) None of these

26)  $\sqrt{16384} \div 4 \times 16 = ? - 18312 \div 12 + 14^2$

- a) 1678
- b) 1842
- c) 1426
- d) 2154
- e) None of these

27)  $(7/9) \text{ of } 4068 + 77\% \text{ of } 1200 = (?)^2 - (128 \div 16)$

- a) 64
- b) 62
- c) 58
- d) 56
- e) None of these

28)  $(8 \times 8)^5 \div (512 \div 8)^2 \times (8 \times 64)^3 = (8)^{?+5}$

- a) 12
- b) 8
- c) 6
- d) 10
- e) None of these

29)  $? \% \text{ of } (75 \times 4 - 150) = 420 + 75^2$

- a) 4280
- b) 4520
- c) 4030
- d) 5060
- e) None of these

30)  $(7/84) \text{ of } (12/156) \text{ of } 4680 = 45 - ?$

- a) 15
- b) 20
- c) 25
- d) 30
- e) None of these

31)  $34\% \text{ of } 4200 - 510 \div ? + 72\% \text{ of } 400 = 1713$

- a) 280
- b) 320
- c) 170
- d) 120
- e) None of these

32)  $(5/8) \text{ of } (16/9) \text{ of } (18/5) \text{ of } 65\% \text{ of } 800 = ?$

- a) 2080
- b) 2260
- c) 1820
- d) 1640
- e) None of these

33)  $(11340 \div 9) + 85\% \text{ of } 1600 - (5/7) \text{ of } 2100 = ? - 11^2$

- a) 1364
- b) 1057
- c) 1125
- d) 1241
- e) None of these

34)  $5 \frac{3}{4} + 6 \frac{1}{2} - 3 \frac{3}{8} + 4 \frac{5}{8} = ? + 1 \frac{1}{2}$

- a)  $15 \frac{3}{4}$
- b) 12
- c) 16
- d)  $17 \frac{1}{2}$

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e) None of these

**35) 30 % of 5400 + 68 % of 4100 =? – 2168**

- a) 6576
- b) 7154
- c) 6243
- d) 5812
- e) None of these

**36) 2370 ÷ 15 × 10 + 33 % of 1800 – (4/7) of 2170 =? + 44**

- a) 560
- b) 670
- c) 890
- d) 720
- e) None of these

**37) ? % of 500 – 8 % of 3000 – (3/8) of (2/3) of 72 = 23**

- a) 56.2
- b) 45.8
- c) 51.4
- d) 42.6
- e) None of these

**38) 24<sup>2</sup> ÷ 4<sup>2</sup> × 120 ÷ 10 = ? – 552 ÷ 4**

- a) 620
- b) 645
- c) 535
- d) 570
- e) None of these

**39)  $\sqrt[3]{97336} + 48\% \text{ of } 1050 - (2/3) \text{ of } 726 = ?$**

- a) 75
- b) 66
- c) 52
- d) 83
- e) None of these

**40) 11 5/8 + 4 7/16 – 9 3/8 + 12 3/16 = ? – 3 7/8**

- a) 22 3/4
- b) 19 5/8

c) 21 1/4

d) 18 1/2

e) None of these

**41) ? % of 800 – 12 % of 2800 – (4/9) of (3/8) of 72 = 24**

- a) 75.5
- b) 58.5
- c) 67.5
- d) 46.5
- e) None of these

**42) 45 × 288 ÷  $\sqrt{1024} + 90 = ?^3 + 12^2 + \sqrt{64}$**

- a) 7
- b) 12
- c) 23
- d) 18
- e) None of these

**43) (5/12) of 6720 + 28 % of 700 =? + 1562**

- a) 1578
- b) 1434
- c) 1352
- d) 1696
- e) None of these

**44) 80 + 426 ÷ 6 – 144 =  $\sqrt[3]{?}$**

- a) 729
- b) 216
- c) 343
- d) 512
- e) None of these

**45)  $\sqrt[3]{32768} + 36\% \text{ of } 1050 - (1/7) \text{ of } 875 = ?$**

- a) 285
- b) 325
- c) 450
- d) 230
- e) None of these

**46)  $\sqrt{33124} \div 13 \times 8 = ? - 16005 \div 15$**

- a) 1267

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- b) 1352  
c) 1488  
d) 1179  
e) None of these

47)  $5\frac{7}{13}$  of  $767 - 17^2 = ? + 561$

- a) 3398  
b) 3526  
c) 3672  
d) 3124  
e) None of these

48)  $4^2 \times \sqrt{576} = 48036 \div 12 + 2141$

- a) 6  
b) 5  
c) 4  
d) 7  
e) None of these

49) ? % of  $(28 \times 9 - 72) = 350 + 35^2$

- a) 750  
b) 875  
c) 925  
d) 660  
e) None of these

50)  $?^3 - (3/11)$  of  $(33/25)$  of  $2925 = 278$

- a) 12  
b) 13  
c) 11  
d) 9  
e) None of these

### Answers:

1) Answer: c)

$$(124/100) * 3250 + (3/8) * 5712 = x^2 + 243$$

$$4030 + 2142 - 243 = x^2$$

$$x^2 = 5929$$

$$x = 77$$

2) Answer: a)

$$(x/100) * 600 = 3285 - [(44 + 19)(44 - 19) \times 19 \div 399]$$

$$6x = 3285 - [63 * 25 * 19/399]$$

$$6x = 3285 - 75$$

$$6x = 3210$$

$$x = (3210/6) = 535$$

3) Answer: d)

$$(72 * 6 * 28) + 1254 \div 3 \div 11 - 66^2 = x$$

$$12096 + 38 - 4356 = x$$

$$x = 7778$$

4) Answer: b)

$$24 + 42\% \text{ of } 250 - 15\% \text{ of } 600 = x$$

$$24 - (42/100) * 250 + (15/100) * 600 = x$$

$$24 - 105 + 90 = x$$

$$x = 9$$

5) Answer: a)

$$(5/17) * (408/55) * (165/240) * 6000 = (25/100) * x$$

$$x = 36000$$

6) Answer: c)

$$\sqrt{[(1573/13) \times (275/55) + 5^3 - 1]} = (1672/11) - x^3$$

$$\sqrt{(121 \times 5 + 125 - 1)} = 152 - x^3$$

$$\sqrt{729} = 152 - x^3$$

$$27 = 152 - x^3$$

$$x^3 = 152 - 27 = 125$$

$$x = 5$$

7) Answer: a)

$$8\frac{4}{7} + 9\frac{3}{4} - 3\frac{5}{8} - 6\frac{29}{56} = x$$

$$x = (8 + 9 - 3 - 6) (4/7 + 3/4 - 5/8 - 29/56)$$

$$x = 8 [(32 + 42 - 35 - 29)/56] = 8 (10/56)$$

$$x = 8 (5/28)$$

8) Answer: c)

$$(42 + 18)(42 - 18) \times 24 \div 128 + (x/100) * 1800 = 1080$$

$$[60 * 24 * 24/128] + 18x = 1080$$

$$(34560/128) + 18x = 1080$$

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$$270 + 18x = 1080$$

$$18x = 1080 - 270$$

$$18x = 810$$

$$x = (810/18) = 45$$

**9) Answer: a)**

$$7^8 \div (49)^2 \times (7^3 \times 7)^3 = (7)^{x+5}$$

$$7^8 \div 7^4 \times 7^{12} = (7)^{x+5}$$

$$7^{8-4+12} = 7^{x+5}$$

$$7^{16} = 7^{x+5}$$

$$16 = x + 5$$

$$x = 11$$

**10) Answer: d)**

$$(114/100) * 1250 + (4/7) * 5712 = x^2 + 65$$

$$1425 + 3264 - 65 = x^2$$

$$x^2 = 4624$$

$$x = 68$$

**11) Answer: b)**

$$(28 \times 9 + 54 \times 3 + 12 \times 11) \div (14^2 - \sqrt{961} + 17) = x$$

$$x = (252 + 162 + 132) \div (196 - 31 + 17)$$

$$x = 546/182$$

$$x = 3$$

**12) Answer: b)**

$$(3/7) * 245 * (135/15) - x = (528/3) + 217$$

$$945 - x = 176 + 217$$

$$x = 945 - 176 - 217$$

$$x = 552$$

**13) Answer: a)**

$$465 * 7 + 12.5 \% \text{ of } 658 + 876.75 = x$$

$$3255 + 82.25 + 876.75 = x$$

$$4214 = x$$

**14) Answer: D**

$$(550 \% \text{ of } 250) \div 275 + 45 \% \text{ of } 780 = x$$

$$1375 \div 275 + 351 = x$$

$$5 + 351 = x$$

$$356 = x$$

**15) Answer: a)**

$$378.35 + 478 \div 12.5 + 456.41 = x$$

$$378.35 + 38.24 + 456.41 = x$$

$$873 = x$$

**16) Answer: d)**

$$\sqrt{571536} \div 42 * x = 5850 + 126$$

$$18 * x = 5976$$

$$x = 332$$

**17) Answer: a)**

$$(5926 - 6729 + 7498 - 3719 - 2937) \times \sqrt{11449} = x$$

$$39 * 107 = x$$

$$4173 = x$$

**18) Answer: c)**

$$0.3 + 3.3 + 33.33 + 333.333 + 3.73 + 33.007 = x$$

$$407 = x$$

**19) Answer: d)**

$$\sqrt{625} \times \sqrt{6241} - 768 \times 3 + \sqrt{15129} + 106 \times 2 = x$$

$$25 * 79 - 2304 + 123 + 212 = x$$

$$6 = x$$

**20) Answer: b)**

$$37.5 \% \text{ of } 80 \% \text{ of } 730 + 160 \% \text{ of } 250 - x = 120$$

$$\% \text{ of } 400$$

$$219 + 400 - x = 480$$

$$139 = x$$

**21) Answer: b)**

$$8^7 \times 2^6 \div 8^{2.4} \times 8^{1.4} = 8^x$$

$$8^7 * 8^2 \div 8^{2.4} * 8^{1.4} = 8^x$$

$$8^{7+2-2.4+1.4} = 8^x$$

$$8^8 = 8^x$$

$$x = 8$$

**22) Answer: b)**

$$23 \times 15 - 60 + (x \div 31) = 292$$

$$285 + (x/31) = 292$$

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$$x/31 = 7$$

$$x = 217$$

**23) Answer: a)**

$$3 \frac{3}{4} + 4 \frac{2}{5} - 3 \frac{1}{8} + 6 \frac{2}{5} = x$$

$$(3 + 4 - 3 + 6) (\frac{3}{4} + \frac{2}{5} - \frac{1}{8} + \frac{2}{5}) = x$$

$$10 (\frac{57}{40}) = x$$

$$11(\frac{17}{40}) = x$$

**24) Answer: a)**

$$\sqrt{841} \times 3 + 120 \% \text{ of } 450 - 180 \% \text{ of } 780 + 60 \% \text{ of } 1800 = x$$

$$29 * 3 + 120/100 * 450 - 180/100 * 780 + 60/100 * 1800 = x$$

$$87 + 540 - 1404 + 1080 = x$$

$$303 = x$$

**25) Answer: c)**

$$25 \% \text{ of } 780 + \sqrt{3249} \times 12 + 865 = x$$

$$195 + 684 + 865 = x$$

$$1744 = x$$

**26) Answer: b)**

$$\sqrt{16384} \div 4 \times 16 = x - 18312 \div 12 + 14^2$$

$$(128/4)*16 = x - (18312/12) + 196$$

$$512 = x - 1526 + 196$$

$$x = 512 + 1526 - 196 = 1842$$

**27) Answer: a)**

$$(7/9)*4068 + (77/100)*1200 = x^2 - (128/16)$$

$$3164 + 924 + 8 = x^2$$

$$x^2 = 4096$$

$$x = 64$$

**28) Answer: d)**

$$(8^2)^5 \div (512/8)^2 \times (8 \times 8^2)^3 = (8)^{x+5}$$

$$8^{10} \div (64)^2 \times (8^3)^3 = (8)^{x+5}$$

$$8^{10} \div 8^4 \times 8^9 = (8)^{x+5}$$

$$8^{10-4+9} = 8^{x+5}$$

$$8^{15} = 8^{x+5}$$

$$15 = x + 5$$

$$x = 10$$

**29) Answer: c)**

$$x \% \text{ of } (75 \times 4 - 150) = 420 + 75^2$$

$$(x/100)*(300 - 150) = 420 + 5625$$

$$(x/100)*150 = 6045$$

$$3x/2 = 6045$$

$$x = 6045*(2/3) = 4030$$

**30) Answer: a)**

$$(7/84)*(12/156)*4680 = 45 - x$$

$$30 = 45 - x$$

$$x = 45 - 30 = 15$$

**31) Answer: c)**

$$34 \% \text{ of } 4200 - 510 \div x + 72 \% \text{ of } 400 = 1713$$

$$(34/100)*4200 - (510/x) + (72/100)*400 = 1713$$

$$1428 + 288 - 1713 = (510/x)$$

$$3 = (510/x)$$

$$x = 510/3 = 170$$

**32) Answer: a)**

$$(5/8)*(16/9)*(18/5)*(65/100)*800 = x$$

$$x = 2080$$

**33) Answer: d)**

$$(11340/9) + (85/100)*1600 - (5/7)*2100 = x - 121$$

$$1260 + 1360 - 1500 + 121 = x$$

$$x = 1241$$

**34) Answer: b)**

$$5 \frac{3}{4} + 6 \frac{1}{2} - 3 \frac{3}{8} + 4 \frac{5}{8} - 1 \frac{1}{2} = x$$

$$x = (5 + 6 - 3 + 4 - 1) + (3/4 + 1/2 - 3/8 + 5/8 - 1/2)$$

$$x = 11 + (6 + 4 - 3 + 5 - 4)/8 = 11 + (8/8) = 12$$

**35) Answer: a)**

$$30 \% \text{ of } 5400 + 68 \% \text{ of } 4100 = x - 2168$$

$$(30/100)*5400 + (68/100)*4100 + 2168 = x$$

$$x = 1620 + 2788 + 2168 = 6576$$

**36) Answer: c)**

$$(2370/15)*10 + (33/100)*1800 - (4/7)*2170 = x +$$

$$44$$

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$$1580 + 594 - 1240 - 44 = x$$

$$x = 890$$

**37) Answer: a)**

$$(x/100)*500 - (8/100)*3000 - (3/8)*(2/3)*72 = 23$$

$$5x - 240 - 18 = 23$$

$$5x = 23 + 240 + 18$$

$$5x = 281$$

$$x = 281/5 = 56.2$$

**38) Answer: d)**

$$24^2 \div 4^2 \times 120 \div 10 = x - 552 \div 4$$

$$[(24*24)/(4*4)]*(120/10) = x - (552/4)$$

$$432 + 138 = x$$

$$x = 570$$

**39) Answer: b)**

$$\sqrt[3]{97336} + 48 \% \text{ of } 1050 - (2/3) \text{ of } 726 = x$$

$$x = 46 + (48/100)*1050 - (2/3)*726$$

$$x = 46 + 504 - 484 = 66$$

**40) Answer: a)**

$$11 \frac{5}{8} + 4 \frac{7}{16} - 9 \frac{3}{8} + 12 \frac{3}{16} + 3 \frac{7}{8} = x$$

$$x = (11 + 4 - 9 + 12 + 3) (\frac{5}{8} + \frac{7}{16} - \frac{3}{8} + \frac{3}{16} + \frac{7}{8})$$

$$x = 21 \frac{28}{16} = 21 \frac{7}{4} = 22 \frac{3}{4}$$

**41) Answer: d)**

$$(x/100)*800 - (12/100)*2800 - (4/9)*(3/8)*72 = 24$$

$$8x - 336 - 12 = 24$$

$$8x = 24 + 336 + 12$$

$$8x = 372$$

$$x = 46.5$$

**42) Answer: a)**

$$45 \times 288 \div 32 + 90 = x^3 + 144 + 8$$

$$(45*288)/32 + 90 - 152 = x^3$$

$$x^3 = 405 + 90 - 152 = 343$$

$$x = 7$$

**43) Answer: b)**

$$(5/12)*6720 + (28/100)*700 = x + 1562$$

$$x = 2800 + 196 - 1562$$

$$x = 1434$$

**44) Answer: c)**

$$80 + (426/6) - 144 = \sqrt[3]{x}$$

$$80 + 71 - 144 = \sqrt[3]{x}$$

$$151 - 144 = \sqrt[3]{x}$$

$$\sqrt[3]{x} = 7$$

$$x = 7^3 = 343$$

**45) Answer: a)**

$$\sqrt[3]{32768} + 36 \% \text{ of } 1050 - (1/7) \text{ of } 875 = x$$

$$32 + (36/100)*1050 - (1/7)*875 = x$$

$$x = 32 + 378 - 125 = 285$$

**46) Answer: d)**

$$\sqrt{33124} \div 13 \times 8 = ? - 16005 \div 15$$

$$(182/13)*8 = x - (16005/15)$$

$$112 = x - 1067$$

$$x = 112 + 1067 = 1179$$

**47) Answer: a)**

$$(72/13)*767 - 289 - 561 = x$$

$$x = 4248 - 289 - 561 = 3398$$

**48) Answer: c)**

$$4^x \times \sqrt{576} = 48036 \div 12 + 2141$$

$$4^x = [(48036/12) + 2141]/24$$

$$4^x = [4003 + 2141]/24$$

$$4^x = 6144/24 = 256$$

$$4^x = 4^4$$

$$x = 4$$

**49) Answer: b)**

$$x \% \text{ of } (28 \times 9 - 72) = 350 + 35^2$$

$$(x/100)*[252 - 72] = 350 + 1225$$

$$(x/100)*180 = 1575$$

$$x = (1575*100)/180 = 875$$

**50) Answer: c)**

$$x^3 - (3/11)*(33/25)*2925 = 278$$





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$$x^3 - 1053 = 278$$

$$x^3 = 1053 + 278 = 1331$$

$$x = 11$$



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