



SBI Clerk 2022 Simplification Ques. (Solutions PDF)

Solutions

1. Ans. B.

$$26.56 + 135.652 = ? - 451.652$$

$$162.212 = ? - 451.652$$

$$? = 162.212 + 451.652$$

$$? = 613.864$$

2. Ans. C.

$$\frac{5}{7} \times 567 + \frac{2}{5} \times 485$$

$$5 \times 81 + 2 \times 97$$

$$405 + 194$$

$$599$$

3. Ans. B.

3. Ans. B.

$$3567.43 + 2788.17 - ? = 1379.56$$

$$6355.6 - ? = 1379.56$$

$$? = 6355.6 - 1379.56$$

$$? = 4976.04$$

Hence, option A is correct.

4. Ans. D.

$$13.013 - 22.104 + 62.903 - 9.048 = ?$$

$$(13.013 - 22.104) + (62.903 - 9.048) = ?$$

$$? = -9.091 + 53.855$$

$$? = 44.764$$

5. Ans. A.

Solution:

$$10563.29 + 7743.17 = x + 6624.6 + 444.4 - 517.3$$

$$18306.46 = x + 7069 - 517.3$$

$$18306.46 = x + 6551.7$$

$$x = 11754.76$$

6. Ans. B.

$$\frac{150}{100} \times 460 + \frac{24}{100} \times 650$$

$$690 + 156$$

$$846$$

7. Ans. B.

$$\frac{73}{100} \times 550 - \frac{68}{100} \times 240$$

$$401.5 - 163.2$$

$$238.3$$

8. Ans. E.

$$55\% \text{ of } 560 - 28\% \text{ of } ? = 308 - 28\% \text{ of } ? = 229.6$$

$$28\% \text{ of } ? = 308 - 229.6 = 78.4$$

$$? = 78.4 \times 100/28 = 280$$

9. Ans. C.

$$\Rightarrow 601 \times \frac{41}{100} - 250 = ? - 910 \times \frac{77}{100}$$

$$\Rightarrow 246 = ? - 700 + 250$$

$$\Rightarrow 246 - 700 = ? + 250$$

$$\Rightarrow ? = 700$$

10. Ans. D.

$$135 + ?^{1/2} = 420 - 25$$

$$135 + ?^{1/2} = 395$$

$$?^{1/2} = 395 - 135$$

$$?^{1/2} = 260$$

$$? = (260)^2$$

$$? = 67600$$

11. Ans. D.

$$\frac{228 \times 105}{1000} - \frac{55 \times 28}{100} = ?$$

$$\frac{114 \times 21}{100} - \frac{11 \times 14}{10} = ?$$

$$\frac{2394}{100} - \frac{154}{10} = ?$$

$$23.94 - 15.4 = ?$$

$$? = 8.54$$

12. Ans. C.

$$\frac{90780}{\sqrt{x}} = 89 \times 12$$

$$\frac{90780}{\sqrt{x}} = 1068$$

$$89 \times 12 = \sqrt{x}$$

$$1020/12 = \sqrt{x}$$

$$85 = \sqrt{x}$$

$$? = 85^2$$

$$? = 7225$$

13. Ans. E.

$$(12.25 \times 4.02 - 14.26) \times ? = 699.7$$

$$(49.245 - 14.26) \times ? = 699.7$$

$$34.985 \times ? = 699.7$$

$$? = 699.7 \div 34.985$$

$$? = 20$$

14. Ans. A.

Let the answer be Y

$$6348 + 26.21 + Y^2 = 560.14$$

By approximation,

$$6350 \div 25 + Y^2 = 560$$

$$254 + Y^2 = 560$$

$$Y^2 = 560 - 254$$

$$Y^2 = 306$$



Since 289 is the closest square.

$$Y^2 \approx 289$$

$$Y = 17$$

Hence the answer is option (A).

15. Ans. D.

Let the answer be Y

$$\frac{49.84}{\sqrt{5.2}} \times 18.12 = 62.21 \times \sqrt{Y}$$

By approximation,

$$\frac{50}{\sqrt{4}} \times 20 = 60 \times \sqrt{Y}$$

$$\frac{50}{2} \times 20 = 60 \times \sqrt{Y}$$

$$500 = 60 \times \sqrt{Y}$$

$$\sqrt{Y} \approx 8$$

Squaring both sides

$$Y \approx 64$$

Hence the answer is option (D).

16. Ans. D.

Let the answer be Y

$$\frac{36.001 \times 8.99}{\sqrt{66.78}} = \sqrt{28.2} \times Y$$

By approximation,

$$\frac{36 \times 9}{\sqrt{64}} = \sqrt{25} \times Y$$

$$\frac{36 \times 9}{8} = 5 \times Y$$

$$Y = \frac{36 \times 9}{8 \times 5}$$

$$Y = \frac{36}{8} \times \frac{9}{5}$$

$$Y \approx 4 \times 2$$

$$Y \approx 8$$

Hence the answer is option (D).

17. Ans. D.

$$\therefore (5)^? = 5^2 \times 25^3 \times 625$$

$$(5)^? = 5^2 \times 5^6 \times 5^4$$

$$(5)^? = 5^{2+6+4}$$

$$\therefore ? = 2 + 6 + 4 = 12$$

18. Ans. E.

$$\sqrt{7 \times 447 \div 21 + 73 - 26}$$

$$= \sqrt{7 \times \frac{447}{21} + 73 - 26}$$

$$= \sqrt{149 + 73 - 26}$$

$$= \sqrt{196}$$

$$= 14$$

Hence option E is correct

19. Ans. B.

$$\sqrt{57 \times 9.5 - (63 \times 11.5) + 1408} = ?$$

$$= \sqrt{541.5 - 724.5 + 1408}$$

$$= \sqrt{1225} = 35$$

20. Ans. D.

$$\sqrt{7569} + 12 \times 104$$

$$= (?)^2 + (23)^2$$

$$\Rightarrow \frac{87}{12} \times 104 = (?)^2 + 529$$

$$\Rightarrow 754 = (?)^2 + 529$$

$$\Rightarrow (?)^2 = 754 - 529 = 225$$

$$\Rightarrow ? = \sqrt{225} = 15$$

21. Ans. A.

$$(3\sqrt{5} + 6)^2 = ? + 36\sqrt{5} + 59$$



$$\Rightarrow 45 + 36 + 36\sqrt{5} = ? + 36\sqrt{5} + 59$$

$$\Rightarrow 81 = ? + 59$$

$$\Rightarrow ? = 81 - 59 = 22$$

22. Ans. A.

$$(41.33)^2 + (7.96)^2 - (22.02)^2 = ?$$

$$? = (41)^2 + (8)^2 - (22)^2$$

$$= 1681 + 64 - 484$$

$$= 1261$$

23. Ans. C.

$$\frac{18 \times 17 - 299}{120 \div 240} = ?$$

$$? = \frac{306 - 299}{1/2}$$

$$? = 7 \times 2 = 14$$

Hence, option C is correct.

24. Ans. B.

$$125 \times 625 \div 25 = 5^{(13-?)}$$

$$125 \times 25 = 5^{(13-?)}$$

$$5^3 \times 5^2 = 5^{(13-?)}$$

$$5^5 = 5^{(13-?)}$$

$$5 = 13 - ?$$

$$? = 13 - 5 = 8$$

$$? = 8$$

25. Ans. B.

$$5^{89} \times 25^{7.2} \div 125^{4.6} = 5^?$$

$$5^{89} \times (5^2)^{7.2} \div (5^3)^{4.6} = 5^?$$

$$5^{89} \times 5^{14.4} \div 5^{13.8} = 5^?$$

$$5^{89+14.4-13.8} = 5^?$$

comparing powers of both sides

$$5^{9.5} = 5^?$$

$$? = 9.5$$

26. Ans. B.

$$52000.001 \div 59.999 \times 30.4154 = ? \times 40.003$$

$$52000 \div 60 \times 30 = ? \times 40$$

$$\Rightarrow ? = 26000/40 = 650$$

27. Ans. B.

$$125 \times 625 \div 25 = 5^{(13-?)}$$

$$125 \times 25 = 5^{(13-?)}$$

$$5^3 \times 5^2 = 5^{(13-?)}$$

$$5^5 = 5^{(13-?)}$$

$$5 = 13 - ?$$

$$? = 13 - 5 = 8$$

$$? = 8$$

28. Ans. B.

By replacing the "?" with "x"

$$12.5 * \frac{14}{8.75} + 42 = 50 + X$$

$$(125 * 140) / 875 + 42 = 50 + X$$

$$140 / 7 + 42 = 50 + X$$

$$20 + 42 = 50 + X$$

$$62 = 50 + X$$

$$X = 62 - 50$$

$$X = 12$$

29. Ans. B.

By approximation,

$$\left(\frac{70}{100} \times 260\right) - 63 = Y - \left(\frac{5}{100} \times 900\right)$$

$$(7 \times 26) - 63 = Y - (5 \times 9)$$

$$182 - 63 = Y - 45$$

$$Y = 182 - 63 + 45 = 164$$

Hence the answer is option (B).

30. Ans. D.

$$(536 - 23\sqrt{28})^{0.5} - (387 + 108\sqrt{7})^{0.5} = (?)$$

$$\Rightarrow (536 - 46\sqrt{7})^{0.5} - (324 + 63 + 108\sqrt{7})^{0.5}$$

$$\Rightarrow (529 + 7 - 2 \times 23 \times \sqrt{7})^{0.5} - ((18)^2 + (3\sqrt{7})^2 + 2 \times 18 \times 3\sqrt{7})^{0.5}$$

$$\Rightarrow (23^2 + (\sqrt{7})^2 - 2 \times 23 \times \sqrt{7})^{0.5} - ((18)^2 + (3\sqrt{7})^2 + 2 \times 18 \times 3\sqrt{7})^{0.5}$$

Using the formula: $(a - b)^2 = a^2 + b^2 - 2ab$ and $(a + b)^2 = a^2 + b^2 + 2ab$

$$\therefore 2 \times 0.5 = 1$$

$$\Rightarrow (23 - \sqrt{7}) - (18 + 3\sqrt{7})$$

$$\Rightarrow 5 - 4\sqrt{7}$$

31. Ans. D.

$$(56 \times 0.25)^4 \div (6860 \div 35)^4 \times (343 \times 8)^4 = (7 \times 2)^{(?)+11}$$

$$\Rightarrow (56 \times 25/100)^4 \div (6860/35)^4 \times (343 \times 8)^4 = (14)^{(?)+11}$$

$$\Rightarrow 14^4 \div 196^4 \times 343^4 \times 8^4 = (14)^{(?)+11}$$

$$\Rightarrow \left(\frac{14 \times 343 \times 8}{196}\right)^4 = (14)^{(?)+11}$$

$$\Rightarrow 196^4 = (14)^{(?)+11}$$

$$\Rightarrow ((14)^2)^4 = (14)^{(?)+11}$$

$$\Rightarrow 14^8 = (14)^{(?)+11}$$



$$\Rightarrow 8 = (?) + 11$$

$$\Rightarrow (?) = -3$$

32. Ans. C.

$$\left(\frac{1600}{100}\right)^6 \div (0.256 \times 10)^7$$

$$\times (1.024 \times 4)^8 = (1.6)^{7-9}$$

$$\Rightarrow (1.6)^6 + (1.6)^{2 \times 7} \times (1.6)^{3 \times 3}$$

$$= (1.6)^{7-9}$$

$$\Rightarrow (1.6)^{6-14.9} = (1.6)^{7-9}$$

$$\Rightarrow ? - 9 = 1$$

$$\Rightarrow ? = 10$$

33. Ans. D.

$$[\{(150\% \text{ of } 44) - 11\}\% \text{ of } 660]\% \text{ of } 25 = (?)\% \text{ of } 165$$

$$\Rightarrow [\{(150/100 \times 44) - 11\}\% \text{ of } 660]\% \text{ of } 25 = (?)\% \text{ of } 165$$

$$\Rightarrow [\{(66) - 11\}\% \text{ of } 660]\% \text{ of } 25 = (?)\% \text{ of } 165$$

$$\Rightarrow [\{55\}\% \text{ of } 660]\% \text{ of } 25 = (?)\% \text{ of } 165$$

$$\Rightarrow [55/100 \times 660]\% \text{ of } 25 = (?)\% \text{ of } 165$$

$$\Rightarrow [363]\% \text{ of } 25 = (?)\% \text{ of } 165$$

$$\Rightarrow 90.75 = (?)\% \text{ of } 165$$

$$\Rightarrow 90.75 = (?) / 100 \times 165$$

$$\Rightarrow 90.75 \times 100 = (?) \times 165$$

$$\Rightarrow 9075 / 165 = (?)$$

$$\Rightarrow (?) = 55$$

34. Ans. D.

$$12^{4.6} \times (169)^{4.75} \times \frac{12^{9.8}}{12^{4.9}} \times (12 \times 13)^{8.5} =$$

$$(\sqrt{24336})^{(?)}$$

$$\Rightarrow 12^{4.6} \times ((13)^2)^{4.75} \times (12)^{9.8 - 4.9} \times (12 \times 13)^{8.5} =$$

$$(156)^{(?)}$$

$$\Rightarrow (12)^{4.6 + 4.9 + 8.5} \times (13)^{9.5 + 8.5} = (156)^{(?)}$$

$$\Rightarrow (12)^{18} \times (13)^{18} = (156)^{(?)}$$

$$\Rightarrow (12 \times 13)^{18} = (156)^{(?)}$$

$$\Rightarrow (156)^{18} = (156)^{(?)}$$

$$\Rightarrow (?) = 18$$

35. Ans. E.

$$(6 + 66 + 666 + 6666 + 66666) - (22$$

$$+ \sqrt{2320 - \sqrt{256}})$$

$$\Rightarrow 6(1 + 11 + 111 + 1111 + 11111) - (22$$

$$+ \sqrt{2320 - 16})$$

$$\Rightarrow 6(12345) - (22 + \sqrt{2304})$$

$$\Rightarrow 74070 - (22 + 48)$$

$$\Rightarrow 74070 - (70)$$

$$\Rightarrow 74000$$

