

SSC Simplification Questions:

Que. 1 Evaluate

- (a) 1 (b) 125 (c) 25 (d) 5 (e) none of these

Question 2. Simplify : $1 - 1 \div \left\{ 1 + 1 \div \left(1 + \frac{1}{3} \right) \right\}$

- (a) $\frac{3}{7}$ (b) $\frac{11}{7}$ (c) $\frac{7}{3}$ (d) $\frac{7}{11}$ (e) none of these

Question 3: Simplify $7\frac{1}{2} - \left[2\frac{1}{4} \div \left\{ 1\frac{1}{4} - \frac{1}{2} \left(1\frac{1}{2} - \frac{1}{3} - \frac{1}{6} \right) \right\} \right]$

- (a) $2\frac{1}{2}$ (b) $3\frac{1}{2}$ (c) $4\frac{1}{2}$ (d) $5\frac{1}{2}$ (e) none of these

Question 4: What is the value of $\frac{5.6 \times 0.36 + 0.42 \times 3.2}{0.8 \times 2.1}$?

- (a) 2 (b) 1 (c) 3 (d) $\frac{3}{2}$

Question 5 : What is the value of

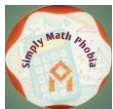
$$\frac{(1.2)^3 + (0.8)^3 + (0.7)^3 - 2.016}{(1.35)[(1.2)^2 + (0.8)^2 + (0.7)^2 - 0.96 - 0.84 - 0.56]}$$

- (a) $\frac{1}{4}$ (b) $\frac{1}{2}$ (c) 1 (d) 2

Question 6: What is the value of ?

$$\sqrt{4600 + \sqrt{540 + \sqrt{1280 + \sqrt{250 + \sqrt{36}}}}}$$

- (a) 69 (b) 68 (c) 70 (d) 72



Question 7: If $4A + \frac{7}{B} + 2C + \frac{5}{D} + 6E$, then the value of $(5A + 3B + 6C + D + 3E)$ is

- (a) 53.6003 (b) 53.603 (c) 153.6003 (d) 213.0003

Question 8: If $1^3 + 2^3 + \dots + 9^3 = 2025$, then the value of $(0.11)^3 + (0.22)^3 + (0.33)^3 + \dots + (0.99)^3$

- is close to (a) 0.2695 (b) 0.3695 (c) 2.695 (d) 3.695

Question 9: The value of $\sqrt{\frac{(0.1)^2 + (0.01)^2 + (0.009)^2}{(0.01)^2 + (0.001)^2 + (0.0009)^2}}$ is

- (a) 0.01 (b) 0.1 (c) 10 (d) 100

Question 10: Simplify $\left(4.8 \times 1.8 \div 3.6 + 5.4 \text{ of } \frac{1}{9} - \frac{1}{5}\right)$

- (a) 2.8 (b) 2 (c) 3.9 (d) 3

Question 11: $\frac{1}{5} + 999\frac{494}{495} \times 99$

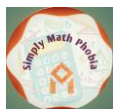
- (a) 99000 (b) 9900 (c) 990 (d) 99

Question 12: Simplify $1 + \frac{1}{1 + \frac{2}{3} + \frac{(8/9)}{(1 - \frac{2}{3})}}$

- (a) $\frac{13}{15}$ (b) $\frac{15}{13}$ (c) $\frac{13}{14}$ (d) $\frac{14}{15}$

Question 13: $999\frac{995}{999} \times 999 = ?$

- (a) 990809 (b) 998996 (c) 998999 (d) 999824



Question 14 : $\frac{3\frac{1}{4} - \frac{4}{5} \text{ of } \frac{5}{6}}{4\frac{1}{3} \div \frac{1}{5} - \left(\frac{3}{10} + 21\frac{1}{5}\right)} - \left(1\frac{2}{3} \text{ of } 1\frac{1}{2}\right) = ?$

- (a) 9 (b) $11\frac{1}{2}$ (c) 13 (d) $15\frac{1}{2}$

Question 15. $999\frac{1}{7} + 999\frac{2}{7} + 999\frac{3}{7} + 999\frac{4}{7} + 999\frac{5}{7} + 999\frac{6}{7} = ?$

- (a) 29997 (b) 5979 (c) 5997 (d) 5994

Question 16. $7\frac{1}{2} - \left[2\frac{1}{4} \div \left\{1\frac{1}{4} - \frac{1}{2} \left(1\frac{1}{2} - \frac{1}{3} - \frac{1}{6}\right)\right\}\right] = ?$

- (a) $\frac{2}{9}$ (b) 1 (c) $4\frac{1}{2}$ (d) $1\frac{77}{288}$

Question 17. $\frac{1\frac{1}{7} - \frac{2}{3} + \frac{\frac{2}{5}}{1 - \frac{1}{25}}}{1 - \frac{1}{7} \left(\frac{1}{3} + \frac{\frac{2}{5}}{1 - \frac{2}{5}}\right)} = ?$

- (a) $\frac{3}{4}$ (b) $\frac{24}{25}$ (c) 1 (d) $1\frac{1}{24}$

Question 18: $\frac{6^6 + 6^6 + 6^6 + 6^6 + 6^6 + 6^6}{3^6 + 3^6 + 3^6} \div \frac{4^6 + 4^6 + 4^6 + 4^6}{2^6 + 2^6} = 2^n$

then the value of n is

- (a) -1 (b) 0 (c) $\frac{1}{2}$ (d) 1

Question 19 : $3\frac{1}{2} + 1\frac{1}{7} \div \frac{1}{2 + \frac{1}{2 + \frac{1}{5 - \frac{1}{5}}}} = ?$

- (a) $\frac{7}{29}$ (b) $\frac{5}{6}$ (c) 1 (d) $\frac{9}{13}$



Question 20 : $N = 55^3 + 17^3 - 72^3$, then N is divisible by

- (a) 3 and 17 (b) 40 and 11 (c) 11 and 15 (d) all of these

Question 21: The value of the expression

$$7777 + 7777 \times 7777 \times (5 \div 77) \times (11 \div 35)$$

- (a) 12344321 (b) 12344321 (c) 7^{7777} (d) 1242098

Question 22: The value of $0.\overline{57} - 0.\overline{432} + 0.\overline{35}$ is

- (a) $0.\overline{494}$ (b) $0.\overline{498}$ (c) $0.\overline{498}$ (d) $0.\overline{494}$

$$\frac{1}{x + \frac{1}{y + \frac{2}{z + \frac{1}{4}}}} = \frac{29}{79}$$

Question 23 : If _____, where x, y and z are natural numbers, then the value of $(2x+3y-z)$ is :

- (a) 1 (b) 4 (c) 0 (d) 2

Question 24 : The value of $3\frac{1}{4} \div 4\frac{1}{2}$ of $5\frac{1}{3} + \frac{1}{8} \div \frac{1}{2}$ of $\frac{1}{4} - \frac{1}{4} \left(\frac{1}{2} \div \frac{1}{8} \times \frac{1}{4} \right)$ is

- (a) $\frac{53}{60}$ (b) $\frac{13}{15}$ (c) $\frac{7}{8}$ (d) $\frac{3}{4}$

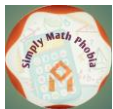
Question 25 : The value of

$$4 \div 12 \text{ of } [3 \div 4 \text{ of } \{(4 - 2) \times 6 \div 2\}] - 2 \times 6 \div 8 + 3 \text{ is}$$

- (a) $4\frac{1}{6}$ (b) $7\frac{1}{6}$ (c) $2\frac{1}{3}$ (d) $3\frac{1}{3}$

Question 26 : The value of $\frac{7 + 3\sqrt{5}}{3 + \sqrt{5}} - \frac{7 - 3\sqrt{5}}{3 - \sqrt{5}}$ lies between

- (a) 2 and 2.5 (b) 3 and 3.5 (c) 1.5 and 2 (d) 2.5 and 3



Question 27 : The value of $\frac{27 \times (0.25)^3 + 125(0.05)^3}{(0.75)^2 - 0.25 \times 0.5}$ is

- (a) 1 (b) 0.25 (c) 0.75 (d) 0.5

Question 28 : $(2 - \frac{1}{3})(2 - \frac{3}{5})(2 - \frac{5}{7}) \dots \dots \dots (2 - \frac{999}{1001}) = ?$

- (a) $\frac{999}{1001}$ (b) $\frac{1003}{3}$ (c) $\frac{1001}{3}$ (d) none of these

Question 29 :

$\frac{1}{(1 \times 2)} + \frac{1}{(2 \times 3)} + \frac{1}{(3 \times 4)} + \dots \dots \dots + \frac{1}{(100 \times 101)} = ?$

- (a) $\frac{1}{100}$ (b) $\frac{100}{101}$ (c) $\frac{101}{102}$ (d) $9\frac{9}{10}$

Question 30 : $\frac{\frac{1}{3} \cdot \frac{1}{3} \cdot \frac{1}{3} + \frac{1}{4} \cdot \frac{1}{4} \cdot \frac{1}{4} - 3 \cdot \frac{1}{3} \cdot \frac{1}{5} \cdot \frac{1}{4} + \frac{1}{5} \cdot \frac{1}{5} \cdot \frac{1}{5}}{\frac{1}{3} \cdot \frac{1}{3} + \frac{1}{4} \cdot \frac{1}{4} + \frac{1}{5} \cdot \frac{1}{5} - (\frac{1}{3} \cdot \frac{1}{4} + \frac{1}{4} \cdot \frac{1}{5} + \frac{1}{3} \cdot \frac{1}{5})}$
=?

- (a) $\frac{2}{3}$ (b) $\frac{3}{4}$ (c) $\frac{47}{60}$ (d) $\frac{49}{60}$

Answer : 1. (a) 2.(a) 3. (c) 4. (a) 5. (d) 6. (b) 7. (c) 8. (c) 9. (c) 10. (a)
11. (a) 12. (a) 13. (b) 14. (c) 15. (c) 16 (c) 17. (d) 18. (b) 19. (c) 20. (d)
21. (d) 22. (c) 23. (d) 24. (a) 25. (a) 26. (a) 27. (a) 28. (b) 29. (b) 30. (c)