Square Roots AND Cube Roots

1. (i) $(111)^2 = ?$ (ii) $(1111)^2 = ?$

(iii) $(45)^2 = ?$ (iv) $(65)^2 = ?$

(v) $(85)^2 = ?$ (vi) $(95)^2 = ?$

(vii) $(47)^2 = ?$ (viii) $(46)^2 = ?$

(ix) $(49)^2 = ?$ (x) $(38)^2 = ?$

(xi) $(36)^2 = ?$ (xii) $(34)^2 = ?$

(xiii) $(54)^2 = ?$ (xiv) $(57)^2 = ?$

(xv) $(62)^2 = ?$ (xvi) $(67)^2 = ?$

(xvii) $(53)^2 = ?$

2. (i) $(99)^2 = ?$ (ii) $(999)^2 = ?$

(iii) $(107)^2 = ?$ (iv) $(113)^2 = ?$

(v) $(106)^2 = ?$ (vi) $(93)^2 = ?$

(vii) $(87)^2 = ?$ (viii) $(84)^2 = ?$

3. (i) $\sqrt{7921} = ?$ (ii) $\sqrt{4489} = ?$

(iii) $\sqrt{9216} = ?$ (iv) $\sqrt{6889} = ?$

(v) $\sqrt{3481} = ?$ (vi) $\sqrt{12544} = ?$

(vii) $\sqrt{17956} = ?$ (viii) $\sqrt{32041} = ?$

(ix) $\sqrt{45369} = ?$ (x) $\sqrt{56169} = ?$

(xi) $\sqrt{58081} = ?$ (xii) $\sqrt{63504} = ?$

(xiii) $\sqrt{84681} = ?$

4. (i) $\sqrt[3]{185193} = ?$ (ii) $\sqrt[3]{226981} = ?$

(iii) $\sqrt[3]{474522} = ?$ (iv) $\sqrt[3]{551368} = ?$

(v) $\sqrt[3]{912673} = ?$ (vi) $\sqrt[3]{592704} = ?$

(vii) $\sqrt[3]{941192} = ?$ (viii) $\sqrt[3]{250047} = ?$

(ix) $\sqrt[3]{1442897} = ?$ (x) $\sqrt[3]{2048383} = ?$

(xi) $\sqrt[3]{1481544} = ?$ (xii) $\sqrt[3]{1601613} = ?$

(xiii) $\sqrt[3]{1092727} = ?$ (xiv) $\sqrt[3]{1520875} = ?$

(xv) $\sqrt[3]{1225043} = ?$ (xvi) $\sqrt[3]{1560896} = ?$

(xvii) $\sqrt[3]{2628072} = ?$

5. If $\sqrt{256} \div \sqrt{x} = 2$, then x is equal to:

(a) 64 (b) 128

(c) 512 (d) 1024

6. Given than $\sqrt{4096} = 64$, the value of $\sqrt{4096} + \sqrt{40.96} + \sqrt{.004096}$ is:

(a) 70.4 (b) 70.464

(c) 71.104 (d) 71.4

7. $\sqrt{248 + \sqrt{52 + \sqrt{144}}}$

(a) 14 (b) 16

(c) 16.6 (d) 18.8

8. $\frac{338}{169} \times \frac{\sqrt{576}}{12} \times \frac{\sqrt{256}}{8} = ?$

(a) 8 (b) 12

(c) 16 (d) 32

9. If $\sqrt{\frac{x}{169}} = \frac{54}{39}$, then x is equal to:

(a) 108 (b) 324

(c) 2916 (d) 4800

10. If $\sqrt{\left(1 + \frac{27}{169}\right)} = \left(1 + \frac{x}{13}\right)$, then x equal to:

(a) 1 (b) 3

(c) 5 (d) 7

11. If $\sqrt{15625} = 125$, then the value of $\sqrt{15625} + \sqrt{156.25} + \sqrt{1.5625}$ is:

(a) 1.3875 (b) 13.875

(c) 138.75 (d) 156.25

12. $\sqrt{1\frac{9}{16}} = ?$

(a) $1\frac{3}{4}$ (b) $1\frac{1}{4}$

(c) 1.125 (d) None of these

13. If $\sqrt{2^n} = 64$, then the value of n is:

(a) 2 (b) 4

(c) 6 (d) 12

14. If $\sqrt{3} = 1.732$ and $\sqrt{2} = 1.414$ the value of $\frac{1}{\sqrt{3}+\sqrt{2}}$ is:

(a) 0.064 (b) 0.308

(c) 0.318 (d) 2.146

15. $\frac{\sqrt{32}+\sqrt{48}}{\sqrt{8}+\sqrt{12}} = ?$

(a) $\sqrt{2}$ (b) 2

(c) 4 (d) 8

16. $\sqrt{\frac{4}{3}} - \sqrt{\frac{3}{4}} = ?$

(a) $\frac{1}{2\sqrt{3}}$ (b) $\frac{1}{\sqrt{3}}$

(c) 1 (d) $\frac{5\sqrt{3}}{6}$

17. The least perfect square number divisible by 3, 4, 5, 6, 8 is:

(a) 900 (b) 1200

(c) 2500 (d) 3600

18. If $\sqrt{2401} = \sqrt{7^x}$, then the value of the x is:

(a) 3 (b) 4

(c) 5 (d) 6

19. What smallest number must be added to 269 to make it a perfect square:

(a) 31 (b) 16

(c) 7 (d) 20

20. $\frac{\sqrt{24}+\sqrt{216}}{\sqrt{96}} = ?$

(a) $2\sqrt{6}$ (b) $6\sqrt{2}$

(c) 2 (d) $\frac{2}{\sqrt{6}}$

21. A gardner wants to plant 17956 trees and arranges them in such a way that there are as many rows as there are trees in a row. The number of trees in a row is:

(a) 144 (b) 136

(c) 154 (d) 134

22. $\sqrt[3]{1-\frac{91}{216}} = ?$

(a) $1-\frac{5}{6}$ (b) $\frac{5}{6}$

(c) $1-\frac{\sqrt[3]{91}}{6}$ (d) None of these

23. What is the smallest number by which 3600 be divivded to make it a perfect cube?

(a) 9 (b) 50

(c) 300 (d) 450

24. The difference of the squares of two consecutice even integers is divisible by which of the following integers?

(a) 3 (b) 4

(c) 6 (d) 7

25. The difference of the squares of two consecutice odd integers is divisible by which of the following integers?

(a) 3 (b) 6

(c) 7 (d) 8

26. Which one of the following cannot be the square of a natural number?

(a) 30976 (b) 75625

(c) 28561 (d) 143642

27. Which one of the following cannot be the square of a natural number?

(a) 32761 (b) 81225

(c) 42437 (d) 20164

28. $\sqrt{4+\sqrt{21+\sqrt{13+\sqrt[3]{19+\sqrt{64}}}}}$ का मान है-

(a) 3 (b) 9

(c) 7 (d) 5

29. $\sqrt{134+\sqrt{86+\sqrt{196}}}$ का मान है-

(a) 14 (b) 16

(c) 12 (d) 18

30. $\frac{\sqrt{4}+\sqrt{3}}{\sqrt{4}-\sqrt{3}} + \frac{\sqrt{4}-\sqrt{3}}{\sqrt{4}+\sqrt{3}}$ बराबर होगा-

(a) $2\sqrt{4}-3\sqrt{3}$ (b) $2\sqrt{4}+3\sqrt{3}$

(c) 7 (d) 4

ANSWERS

1.(i) (12321)	(xiii) (2916)	(viii) (7056)	(xii) (252)	(xi) (114)	14. (c)
					15. (b)
(ii) (1234321)	(xiv) (3249)	3.(i) (89)	(xiii) (291)	(xii) (117)	16. (a)
					17. (b)
(iii) (2025)	(xv) (3844)	(ii) (67)	4.(i) (57)	(xiii) (103)	18. (b)
					19. (d)
(iv) (4225)	(xvi) (4489)	(iii) (96)	(ii) (61)	(xiv) (115)	20. (c)
					21. (d)
(v) (7225)	(xvii) (2809)	(iv) (83)	(iii) (78)	(xv) (117)	22. (b)
					23. (d)
(vi) (9025)	2.(i) (9801)	(v) (59)	(iv) (82)	(xvi) (116)	24. (b)
					25. (d)
(vii) (2209)	(ii) (998001)	(vi) (112)	(v) (97)	(xvii) (138)	26. (d)
					27. (c)
(viii) (2116)	(iii) (11449)	(vii) (134)	(vi) (84)	5. (a)	28. (a)
				6. (b)	29. (c)
(ix) (2401)	(iv) (12769)	(viii) (179)	(vii) (98)	7. (b)	30. (c)
				8. (a)	
(x) (1444)	(v) (11236)	(ix) (213)	(viii) (63)	9. (b)	
				10. (a)	
(xi) (1296)	(vi) (8649)	(x) (237)	(ix) (113)	11. (c)	
				12. (b)	
(xii) (1156)	(vii) (7569)	(xi) (241)	(x) (127)	13. (d)	