

CEVAPLI TEST-4

1. $\sqrt{8-2\sqrt{15}} + \sqrt{3} = 5^{\frac{x}{3}}$ ise $x=?$

- A) $\frac{2}{3}$ B) 1 C) $\frac{3}{2}$ D) 2 E) 3

2. $\sqrt[8]{5-2\sqrt{6}} \cdot \sqrt[4]{\sqrt{3}+\sqrt{2}} = ?$

- A) 1 B) 2 C) 3 D) 4 E) 5

3. $\left(\frac{\sqrt{4+\sqrt{7}}}{\sqrt{2}} - \frac{1}{2} \right)^2 = ?$

- A) $\frac{2}{7}$ B) $\frac{3}{7}$ C) $\frac{7}{4}$ D) 2 E) 3

4. $\sqrt{12-2\sqrt{35}} \cdot (\sqrt{7}+\sqrt{5}) = ?$

- A) 2 B) 3 C) 4 D) 5 E) 6

5. $(8+\sqrt{60})(\sqrt{5}-\sqrt{3})^2 = ?$

- A) 3 B) 4 C) 5 D) 6 E) 7

6. $\frac{(3-2\sqrt{2})^7 \cdot (\sqrt{3}+1)^6}{(\sqrt{3}-1)^8} = ?$

- A) 27 B) 32 C) 49 D) 64 E) 70

7. $\sqrt{a+\sqrt{4b}} = \sqrt{3}+1$ ise $\sqrt{a+b+2} = ?$

- A) 1 B) 2 C) 3 D) 4 E) 5

8. (*) $\frac{\sqrt[3]{4-2\sqrt{3}} \cdot (\sqrt{3}+1)}{\sqrt[3]{\sqrt{3}+1}} = ?$

- A) $\sqrt[3]{4}$ B) $\sqrt[3]{8}$ C) $\sqrt[3]{16}$ D) $\sqrt[6]{8}$ E) $\sqrt[3]{9}$

9. $\left. \begin{array}{l} a = \sqrt{11}-\sqrt{7} \\ b = \sqrt{11}+\sqrt{7} \end{array} \right\}$ ise a ve b nin geometrik ortası kaçtır?

- A) 1 B) 2 C) 5 D) 6 E) 8

10. $\left(\sqrt{\sqrt{5}+1} - \sqrt{\sqrt{5}-1} \right)^2 = \frac{A}{\sqrt{5}+2}$

ise A kaçtır?

- A) 0 B) $\frac{1}{2}$ C) $\frac{3}{2}$ D) 2 E) 4

11. $\left. \begin{array}{l} \sqrt{a+\sqrt{a+\sqrt{a+\dots}}} = 8 \\ \sqrt{12-\sqrt{12-\sqrt{12-\dots}}} = b \end{array} \right\}$ ise $a+b=?$

- A) 11 B) 35 C) 59 D) 72 E) 76

12. $\sqrt[3]{a + \sqrt{6 + \sqrt[3]{a + \sqrt{6 + \dots}}}} = 3$
ise $a = ?$
A) 12 B) 22 C) 24 D) 32 E) 33

13. $\sqrt{a^2 - 4a + \sqrt{a^2 - 4a + \sqrt{\dots}}} = 4$
ise a nın alabileceği değerler çarpımı kaçtır?
A) 12 B) 6 C) 0 D) 6 E) -12

14. $x, y \in \mathbb{Z}^+$ olmak üzere

$\left(\sqrt[7]{4 \sqrt[7]{4 \sqrt[7]{4 \dots}}} \right)^x = \sqrt[5]{64}$ ise $\sqrt{x \cdot y} = ?$

A) $3\sqrt{2}$ B) $3\sqrt{3}$ C) $4\sqrt{2}$
D) $3\sqrt{5}$ E) $\sqrt{2}$

15. $2 + \frac{2 + \frac{2 + \dots}{\sqrt{5}}}{\sqrt{5}} = ?$

A) $\frac{5 + \sqrt{5}}{2}$ B) $5 + \sqrt{5}$ C) 2
D) 4 E) 5

16. $x \in \mathbb{Z}^+$ olmak üzere

$\sqrt[3]{36 : \sqrt[3]{36 : \sqrt[3]{36 : \dots}}} = \sqrt[5]{6^3}$ ise

$\sqrt{x - \sqrt{x - \sqrt{x - \dots}}} = ?$

A) 1 B) 2 C) 5 D) 8 E) 9

17. $\sqrt[3]{2 \sqrt{4 \sqrt[3]{2 \sqrt{4 \sqrt[3]{2 \sqrt{4 \dots}}}}}} = ?$
A) 2 B) $2^{\frac{4}{5}}$ C) $2^{\frac{5}{6}}$ D) $2^{\frac{6}{7}}$ E) 1

18. $\sqrt[3]{x} < \sqrt{5}$ koşulunu sağlayan x doğal sayısının en büyük değeri kaçtır?
A) 9 B) 10 C) 11 D) 12 E) 13

19. $x - \sqrt{x} = 6$ ise

$\frac{\sqrt{x} + 3x}{5} + \frac{4x}{3} = ?$

A) 18 B) 17 C) 15 D) 10 E) 5

20. $\left. \begin{array}{l} x = \sqrt[3]{5^2} \\ y = \sqrt[5]{5^4} \\ z = \sqrt{5} \end{array} \right\}$ ise x, y, z yi sıralayın.

A) $y < x < z$ B) $z < x < y$
C) $x < y < z$ D) $x < z < y$
E) $z < y < x$

1	2	3	4	5	6	7	8	9	10
C	A	C	A	B	D	C	A	B	D
11	12	13	14	15	16	17	18	19	20
C	C	E	A	A	B	B	C	A	B