

MATEMATİK DEFTERİ
KÖKLÜ SAYILAR - TEST 2

1.SORU: $\sqrt{1-\frac{5}{9}} + \sqrt{5+\frac{4}{9}}$
 $= \sqrt{\frac{4}{9}} + \sqrt{\frac{49}{9}}$
 $= \frac{2}{3} + \frac{7}{3} = \frac{9}{3} = 3$

Cevap: C

2.SORU: $\sqrt{0,81} - \sqrt{0,04} + \sqrt{0,16}$
 $= \sqrt{\frac{81}{100}} - \sqrt{\frac{4}{100}} + \sqrt{\frac{16}{100}}$
 $= \frac{9}{10} - \frac{2}{10} + \frac{4}{10}$
 $= \frac{11}{10} = 1,1$

Cevap: A

3.SORU: $\frac{\sqrt{0,36} + \sqrt{0,16}}{\sqrt{1,21} - \sqrt{0,09}}$
 $= \frac{\sqrt{\frac{36}{100}} + \sqrt{\frac{16}{100}}}{\sqrt{\frac{121}{100}} - \sqrt{\frac{9}{100}}} = \frac{\frac{6}{10} + \frac{4}{10}}{\frac{11}{10} - \frac{3}{10}} = \frac{\frac{10}{10}}{\frac{8}{10}} = \frac{10}{8} = \frac{5}{4}$
Cevap: A

4.SORU: $3\sqrt{0,12} + 4\sqrt{0,03} - 2\sqrt{0,48}$
 $= 3\sqrt{\frac{12}{100}} + 4\sqrt{\frac{3}{100}} - 2\sqrt{\frac{48}{100}}$
 $= 3 \cdot \frac{2\sqrt{3}}{10} + 4 \cdot \frac{\sqrt{3}}{10} - 2 \cdot \frac{4\sqrt{3}}{10}$
 $= \frac{6\sqrt{3} + 4\sqrt{3} - 8\sqrt{3}}{10} = \frac{2\sqrt{3}}{10} = \frac{\sqrt{3}}{5}$

Cevap: C

5.SORU: $\sqrt{1+\sqrt{7+\sqrt{1+\sqrt{9}}}}$
 $= \sqrt{1+\sqrt{7+\sqrt{1+3}}}$
 $= \sqrt{1+\sqrt{7+\sqrt{4}}}$
 $= \sqrt{1+\sqrt{7+2}}$
 $= \sqrt{1+\sqrt{9}}$
 $= \sqrt{1+3} = \sqrt{4} = 2$

Cevap: A

6.SORU: $2\sqrt{45} - 4\sqrt{20} + \sqrt{5}$
 $= 2 \cdot 3\sqrt{5} - 4 \cdot 2\sqrt{5} + \sqrt{5}$
 $= 6\sqrt{5} - 8\sqrt{5} + \sqrt{5}$
 $= -\sqrt{5}$

Cevap: A

7.SORU: $3\sqrt{8} - \sqrt{2} + \sqrt{50}$
 $= 3 \cdot 2\sqrt{2} - \sqrt{2} + 5\sqrt{2}$
 $= 6\sqrt{2} - \sqrt{2} + 5\sqrt{2}$
 $= 10\sqrt{2}$

Cevap: D

8.SORU: $\frac{\sqrt{27} - \sqrt{12} + \sqrt{48}}{\sqrt{3}}$
 $= \frac{3\sqrt{3} - 2\sqrt{3} + 4\sqrt{3}}{\sqrt{3}}$
 $= \frac{5\sqrt{3}}{\sqrt{3}} = 5$

Cevap: B

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9.SORU: $\frac{\sqrt{50} - \sqrt{32} + \sqrt{18}}{\sqrt{72} - \sqrt{18} + \sqrt{2}}$
 $= \frac{5\sqrt{2} - 4\sqrt{2} + 3\sqrt{2}}{6\sqrt{2} - 3\sqrt{2} + \sqrt{2}}$
 $= \frac{4\sqrt{2}}{4\sqrt{2}} = 1$

Cevap: A

10.SORU: $\frac{2\sqrt{99} + 5\sqrt{44}}{\sqrt{176}}$
 $= \frac{2 \cdot 3\sqrt{11} + 5 \cdot 2\sqrt{11}}{4\sqrt{11}}$
 $= \frac{6\sqrt{11} + 10\sqrt{11}}{4\sqrt{11}} = \frac{16\sqrt{11}}{4\sqrt{11}} = 4$

Cevap: C

11.SORU: $\frac{\sqrt{45} + \sqrt{80}}{\sqrt{125} - 2\sqrt{20}}$
 $= \frac{3\sqrt{5} + 4\sqrt{5}}{5\sqrt{5} - 2 \cdot 2\sqrt{5}}$
 $= \frac{7\sqrt{5}}{5\sqrt{5} - 4\sqrt{5}} = \frac{7\sqrt{5}}{\sqrt{5}} = 7$

Cevap: A

12.SORU: $\frac{\sqrt{0,4} + \sqrt{0,9}}{\sqrt{2,5}}$
 $= \frac{\sqrt{\frac{4}{10}} + \sqrt{\frac{9}{10}}}{\sqrt{\frac{25}{10}}} = \frac{\frac{2}{\sqrt{10}} + \frac{3}{\sqrt{10}}}{\frac{5}{\sqrt{10}}} = \frac{5}{5} = 1$

Cevap: E

13.SORU: $\frac{\sqrt{3,6} \cdot \sqrt{6,4} \cdot \sqrt{10}}{\sqrt{7,2}}$
 $= \frac{\sqrt{\frac{36}{10}} \cdot \sqrt{\frac{64}{10}} \cdot \sqrt{10}}{\sqrt{\frac{72}{10}}} = \frac{\frac{6}{\sqrt{10}} \cdot \frac{8}{\sqrt{10}} \cdot \sqrt{10}}{\frac{6\sqrt{2}}{\sqrt{10}}}$
 $= \frac{6}{\sqrt{10}} \cdot \frac{8}{\sqrt{10}} \cdot \frac{\sqrt{10}}{6\sqrt{2}} \cdot \sqrt{10} = \frac{8}{\sqrt{2}} = \frac{8\sqrt{2}}{2} = 4\sqrt{2}$

Cevap: E

14.SORU: $\frac{\sqrt{2} \cdot \sqrt{2} \cdot \sqrt{8}}{\sqrt{2} + \sqrt{2} + \sqrt{8}}$
 $= \frac{2 \cdot 2\sqrt{2}}{2\sqrt{2} + 2\sqrt{2}} = \frac{4\sqrt{2}}{4\sqrt{2}} = 1$

Cevap: A

15.SORU: $\sqrt{9} + \sqrt{(-9)^2} - \sqrt{(-16)^2}$
 $= 3 + |-9| - |-16|$
 $= 3 + 9 - 16$
 $= -4$

Cevap: A

16.SORU: $\sqrt{(-16)^2} + \sqrt[5]{(-15)^5} - \sqrt{(-2)^4}$
 $= |-16| + (-15) - (-2)^2$
 $= 16 - 15 - 4$
 $= -3$

Cevap: B