

MATEMATİK DEFTERİ-3
KÖKLÜ SAYILAR - TEST 1

1.SORU: $\sqrt{\sqrt{25} + \sqrt{36} - \sqrt{4}}$

$$= \sqrt{5 + 6 - 2}$$
$$= \sqrt{9}$$
$$= 3$$

Cevap: B

5.SORU: $\sqrt{0,81} - \sqrt{0,04} - \sqrt{0,16}$

$$= \sqrt{\frac{81}{100}} - \sqrt{\frac{4}{100}} - \sqrt{\frac{16}{100}}$$
$$= \frac{9}{10} - \frac{2}{10} - \frac{4}{10}$$
$$= \frac{3}{10} = 0,3$$

Cevap: A

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

$$= \sqrt{\frac{25}{9}} + \sqrt{\frac{1}{4}}$$
$$= \frac{5}{3} + \frac{1}{2} = \frac{10+3}{6} = \frac{13}{6}$$

Cevap: E

6.SORU: $\frac{\sqrt{0,25} + \sqrt{0,49} - \sqrt{0,04}}{\sqrt{0,04} + \sqrt{0,64}}$

$$= \frac{\sqrt{\frac{25}{100}} + \sqrt{\frac{49}{100}} - \sqrt{\frac{4}{100}}}{\sqrt{\frac{4}{100}} + \sqrt{\frac{64}{100}}}$$
$$= \frac{\frac{5}{10} + \frac{7}{10} - \frac{2}{10}}{\frac{2}{10} + \frac{8}{10}} = \frac{\frac{10}{10}}{\frac{10}{10}} = 1$$

Cevap: A

3.SORU: $\frac{\sqrt{5 + \frac{5}{4}}}{\sqrt{2 + \sqrt{1 - \frac{15}{16}}}} = x$

$$\frac{\sqrt{\frac{25}{4}}}{\sqrt{2 + \sqrt{\frac{1}{16}}}} = \frac{\frac{5}{2}}{\sqrt{2 + \frac{1}{4}}} = \frac{\frac{5}{2}}{\sqrt{\frac{9}{4}}} = \frac{\frac{5}{2}}{\frac{3}{2}} = \frac{5}{3}$$

Cevap: D

7.SORU: $\frac{\sqrt{0,64} + \sqrt{0,09}}{\sqrt{0,49} + \sqrt{0,16}}$

$$= \frac{\sqrt{\frac{64}{100}} + \sqrt{\frac{9}{100}}}{\sqrt{\frac{49}{100}} + \sqrt{\frac{16}{100}}}$$
$$= \frac{\frac{8}{10} + \frac{3}{10}}{\frac{7}{10} + \frac{4}{10}} = \frac{\frac{11}{10}}{\frac{11}{10}} = 1$$

Cevap: C

4.SORU: 0,16 nin karekökü : $\sqrt{0,16}$

$$\sqrt{0,16} = \sqrt{\frac{16}{100}} = \frac{4}{10} = 0,4$$

Cevap: B

8.SORU: $\sqrt{5 + \sqrt{12 + \sqrt{18 - \sqrt{4}}}}$

$$= \sqrt{5 + \sqrt{12 + \sqrt{18 - 2}}}$$
$$= \sqrt{5 + \sqrt{12 + \sqrt{16}}}$$
$$= \sqrt{5 + \sqrt{12 + 4}}$$
$$= \sqrt{5 + \sqrt{16}}$$
$$= \sqrt{5 + 4} = \sqrt{9} = 3$$

Cevap: A

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9.SORU: $\sqrt{75} - \sqrt{48} + \sqrt{108}$
 $= 5\sqrt{3} - 4\sqrt{3} + 6\sqrt{3}$
 $= 7\sqrt{3}$

Cevap: A

13.SORU: $\frac{3\sqrt{72} - 2\sqrt{18}}{\sqrt{32} - \sqrt{50}}$
 $= \frac{3 \cdot 6\sqrt{2} - 2 \cdot 3\sqrt{2}}{4\sqrt{2} - 5\sqrt{2}}$
 $= \frac{18\sqrt{2} - 6\sqrt{2}}{-\sqrt{2}}$
 $= \frac{12\sqrt{2}}{-\sqrt{2}} = -12$

Cevap: E

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

Cevap: A

14.SORU: $\frac{\sqrt{3} \cdot \sqrt{12}}{\sqrt{0,16} + \sqrt{0,36}}$
 $= \frac{\sqrt{3} \cdot 2\sqrt{3}}{\sqrt{\frac{16}{100}} + \sqrt{\frac{36}{100}}}$
 $= \frac{2 \cdot 3}{\frac{4}{10} + \frac{6}{10}} = \frac{6}{\frac{10}{10}} = \frac{6}{1} = 6$

Cevap: C

11.SORU: $\frac{\sqrt{300} + \sqrt{75}}{\sqrt{75} - \sqrt{12}}$
 $= \frac{10\sqrt{3} + 5\sqrt{3}}{5\sqrt{3} - 2\sqrt{3}}$
 $= \frac{15\sqrt{3}}{3\sqrt{3}} = 5$

Cevap: B

15.SORU: $\frac{\sqrt{65} \cdot \sqrt{15}}{\sqrt{39}}$
 $= \sqrt{\frac{65 \cdot 15}{39}}$
 $= \sqrt{\frac{5 \cdot 13 \cdot 3 \cdot 5}{3 \cdot 13}}$
 $= \sqrt{5 \cdot 5} = 5$

Cevap: D

12.SORU: $\frac{\sqrt{27} - \sqrt{12} + \sqrt{75}}{\sqrt{48}}$
 $= \frac{3\sqrt{3} - 2\sqrt{3} + 5\sqrt{3}}{4\sqrt{3}}$
 $= \frac{6\sqrt{3}}{4\sqrt{3}} = \frac{3}{2}$

Cevap: C

16.SORU: $\frac{\sqrt{40} \cdot \sqrt{12}}{\sqrt{120}}$
 $= \sqrt{\frac{40 \cdot 12}{120}}$
 $= \sqrt{\frac{12}{3}}$
 $= \sqrt{4} = 2$

Cevap: A