Priprema za ispit znanja (kvadriranje i korjenovanje)

1. Korjenuj:

a) $\overline{121}$ b) $\overline{169}$ c) $\overline{\frac{81}{225}}$ d) $\overline{0.09}$ e) $\overline{2\frac{2}{49}}$.

2. Izračunaj:

a) $(\ \overline{5}\ )^2$ b) $(3\ \overline{6}\ )^2$ c) $(\frac{\overline{6}}{4})^2$ d) $(\ \overline{12}\ +\ \overline{3}\ )^2$ e) $\overline{7}\cdot(\ \overline{3}\ -\ \overline{7}\ )$.

3. Izračunaj:

a) $2\ \overline{5}\ +\ 5\ \overline{5}$ b) $15\ \overline{7}+7\ \overline{11}\ -6\ \overline{7}\ -8\ \overline{11}$.

4. Izračunaj:

a) $\overline{3}\cdot\ \overline{12}$ b) $\frac{\overline{50}}{\overline{2}}$ c) $\frac{\overline{5}}{6}\cdot\ \frac{\overline{10}}{3}$ d) $\frac{\overline{3}}{98}:\ \frac{\overline{75}}{2}$.

5. Djelomično korjenuj:

a) $\overline{20}$ b) $\overline{300}$ c) $\overline{75}\ +\ \overline{125}\ -2\ \overline{5}$.

6. Racionaliziraj nazivnik:

a) $\frac{1}{\overline{5}}$ b) $\frac{4}{\overline{8}}$ c) $\frac{\overline{2}}{\overline{3}}$.

7. Riješi jednadžbe:

a) $x^2 = 100$ b) $4x^2 = 16$ c) $x^2 - 25 = 0$ d) $2x^2 - 40 = 0$.

8. Kvadriraj:

a) $(3a - b)^2$ b) $(\frac{2}{3}x + \frac{1}{4})^2$ c) $16x^2 - 81y^2$ d) $(7x - 4)(7x + 4)$.

9. Potenciraj:

a) $10^5 \cdot 10^7$ b) $10^{13} : 10^9$ c) $(10^5)^6$ d) $5\cdot10^6 - 7\cdot10^6 + 3\cdot10^6$.