

ЧАС БРОЈ 5: Квадрат рационалног броја

1. Израчунај:

$$a) \frac{3}{5^2} - (-1)^2 = \frac{3}{25} - 1 = \frac{3}{25} - \frac{25}{25} = \boxed{-\frac{22}{25}}$$

$$b) (-3)^2 - (-9) = 9 + 9 = \boxed{18}$$

$$в) -4 \cdot \left(-\frac{1}{4}\right)^2 + \frac{3}{2^2} = -4^1 \cdot \frac{1}{\cancel{16}^4} + \frac{3}{4} = -\frac{1}{4} + \frac{3}{4} = \frac{2}{4} = \boxed{\frac{1}{4}}$$

$$г) 2 \cdot \left(\frac{1}{2}\right)^2 + (-0,3) : 3^2 = 2 \cdot \frac{1}{4} + \left(-\frac{3}{10}\right) : 9 = \frac{1}{2} + \left(-\frac{\cancel{3}^1}{10}\right) \cdot \frac{1}{\cancel{9}^3} = \frac{1}{2} - \frac{1}{30} = \frac{15}{30} - \frac{1}{30} = \frac{14}{30} = \boxed{\frac{7}{15}}$$

$$d) \frac{1}{5} : \left((-0,1)^2 - \frac{1}{10}\right) = \frac{1}{5} : \left(\left(-\frac{1}{10}\right)^2 - \frac{1}{10}\right) = \frac{1}{5} : \left(\frac{1}{100} - \frac{1}{10}\right)$$

$$= \frac{1}{5} : \left(\frac{1}{100} - \frac{10}{100}\right) = \frac{1}{5} : \left(-\frac{9}{100}\right)$$

$$= \frac{1}{\cancel{5}^1} \cdot \left(-\frac{\cancel{100}^{20}}{9}\right) = -\frac{20}{9} = \boxed{-2\frac{2}{9}}$$

$$ђ) \left(-1\frac{2}{3}\right)^2 \cdot \left(0,2^2 - \left(-\frac{3^2}{5}\right)\right) = \left(-\frac{5}{3}\right)^2 \cdot \left(\left(\frac{1}{5}\right)^2 - \left(-\frac{9}{5}\right)\right)$$

$$= \frac{25}{9} \cdot \left(\frac{1}{25} + \frac{9}{5}\right)$$

$$= \frac{25}{9} \cdot \left(\frac{1}{25} + \frac{45}{25}\right)$$

$$= \frac{\cancel{25}^1}{9} \cdot \frac{46}{\cancel{25}^1}$$

$$= \frac{46}{9} = \boxed{5\frac{1}{25}}$$

Домаћи задатак:

Збирка задатака:

12. страна:

31. задатак: а, б

32. задатак: а, б