

Час број 22: Вежба

32 задатак (12. страна):

$$а) (-4^2) \cdot \left(-\frac{1}{4}\right)^2 + 3 \cdot (3-6)^2 = (-16) \cdot \frac{1}{16} + 3 \cdot (-3)^2 = -1 + 3 \cdot 9 = -1 + 27 = \boxed{26}$$

$$б) \frac{3}{4^2} - \frac{3^2}{4} - \left(\frac{3}{4}\right)^2 - \left(-\frac{3}{4}\right)^2 = \frac{3}{16} - \frac{9}{4} - \frac{9}{16} - \frac{9}{16} = \frac{3}{16} - \frac{36}{16} - \frac{9}{16} - \frac{9}{16} = \boxed{-\frac{51}{16}}$$

84 задатак (21. страна):

$$а) \sqrt{2} + \frac{2}{\sqrt{2}} = \sqrt{2} + \sqrt{2} = \boxed{2\sqrt{2}} \qquad \frac{2}{\sqrt{2}} = \frac{2}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{2\sqrt{2}}{\sqrt{4}} = \frac{\cancel{2}^1 \sqrt{2}}{\cancel{2}^1} = \sqrt{2}$$

$$б) 5\sqrt{5} + \frac{5}{\sqrt{5}} = 5\sqrt{5} + \sqrt{5} = \boxed{6\sqrt{5}} \qquad \frac{5}{\sqrt{5}} = \frac{5}{\sqrt{5}} \cdot \frac{\sqrt{5}}{\sqrt{5}} = \frac{5\sqrt{5}}{\sqrt{25}} = \frac{5\sqrt{5}}{5} = \sqrt{5}$$

85 задатак (21. страна):

$$е) 2\sqrt{12} - 3\sqrt{27} + \sqrt{48} = 2 \cdot 2\sqrt{3} - 3 \cdot 3\sqrt{3} + 4\sqrt{3} = \\ = 4\sqrt{3} - 9\sqrt{3} + 4\sqrt{3} = \\ = -1\sqrt{3} = \boxed{-\sqrt{3}}$$

$$\sqrt{12} = \sqrt{4 \cdot 3} = \sqrt{4} \cdot \sqrt{3} = 2 \cdot \sqrt{3} = 2\sqrt{3} \\ \sqrt{27} = \sqrt{9 \cdot 3} = \sqrt{9} \cdot \sqrt{3} = 3 \cdot \sqrt{3} = 3\sqrt{3} \\ \sqrt{48} = \sqrt{16 \cdot 3} = \sqrt{16} \cdot \sqrt{3} = 4 \cdot \sqrt{3} = 4\sqrt{3}$$

$$з) -2\sqrt{75} + 5\sqrt{3} + 3\sqrt{108} = -2 \cdot 5\sqrt{3} + 5\sqrt{3} + 3 \cdot 6\sqrt{3} = \\ = -10\sqrt{3} + 5\sqrt{3} + 18\sqrt{3} = \\ = \boxed{13\sqrt{3}}$$

$$\sqrt{75} = \sqrt{25 \cdot 3} = \sqrt{25} \cdot \sqrt{3} = 5\sqrt{3} \\ \sqrt{108} = \sqrt{36 \cdot 3} = \sqrt{36} \cdot \sqrt{3} = 6\sqrt{3}$$

Домаћи задатак:

Збирка задатака:

12. страна:

32. задатак: г

21. страна:

84. задатак: в

87. задатак: в, ђ