

N1

a) $-\sqrt{398} = -\sqrt{2 \cdot 199}$ - вынесенное не вышло.

б) $-\frac{2}{7}\sqrt{4900} = -\frac{2}{7} \cdot 70 = -\frac{2 \cdot 70}{7} = -20$

в) $\sqrt{7a^2} = |a|\sqrt{7} = a\sqrt{7}, a \geq 0.$

N2

а) $\sqrt{3a}$ - не zero вынесло!

б) $6\sqrt{\frac{1}{3}} = \sqrt{6^2 \cdot \frac{1}{3}} = \sqrt{\frac{36}{3}} = \sqrt{12};$

в) $12\sqrt{a} = \sqrt{12^2 \cdot a} = \sqrt{144a};$

г) $6\sqrt{8^3} = \sqrt{6^2 \cdot 8^3} = \sqrt{6^5}$

д) $-a\sqrt{2a} = -\sqrt{a^2 \cdot 2a} = -\sqrt{2a^3}$

е) $0,1e\sqrt{e^5} = \sqrt{0,1^2 e^2 e^5} = \sqrt{0,01e^7}$

N3

$$6\sqrt{3} + \sqrt{27} - 3\sqrt{75} = 6\sqrt{3} + 3\sqrt{3} - 3 \cdot 5\sqrt{3} =$$

$$= 6\sqrt{3} + 3\sqrt{3} - 15\sqrt{3} = \sqrt{3}(6+3-15) = -6\sqrt{3}$$

N4

$$\frac{2}{7}\sqrt{98} - \frac{1}{3}\sqrt{18} - \sqrt{128} = \frac{2}{7} \cdot \sqrt{49 \cdot 2} - \frac{1}{3} \sqrt{9 \cdot 2} - \sqrt{64 \cdot 2} =$$

$$= \frac{2}{7} \cdot 7\sqrt{2} - \frac{1}{3} \cdot 3\sqrt{2} - 8\sqrt{2} = 2\sqrt{2} - \sqrt{2} - 8\sqrt{2} = -7\sqrt{2}$$

N5

$-2\sqrt{2}; -0,5\sqrt{6}; 3\sqrt{10}; \frac{1}{2}\sqrt{24}; 0,5\sqrt{72}$

$\frac{1}{2}\sqrt{24} = \sqrt{6}$

$0,5\sqrt{72} = \sqrt{18}$

$3\sqrt{10} = \sqrt{90}$

$\frac{1}{2}\sqrt{24} = \sqrt{6}$

$0,5\sqrt{72} = \sqrt{18}$

ответ:

$-2\sqrt{2}; -0,5\sqrt{6}; \frac{1}{2}\sqrt{24};$

$0,5\sqrt{72}; 3\sqrt{10}.$