kontrolloppgaver sinus forkurs

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a)

$$\sqrt{12} - \sqrt{27} + \sqrt{48} = \sqrt{4*3} - \sqrt{3*9} + \sqrt{12*4}$$
$$= 2*\sqrt{3} - \sqrt{3}*3 + \sqrt{3}*\sqrt{4}*2$$
$$= 2*\sqrt{3} - \sqrt{3}*3 + \sqrt{3}*2*2$$
$$= 2\sqrt{3} - 3\sqrt{3} + 4\sqrt{3}$$
$$= 3\sqrt{3}$$

b)

$$\sqrt{18} - \sqrt{32} + \sqrt{2} = \sqrt{9*2} - \sqrt{4*8} + \sqrt{2}$$
$$= 3\sqrt{2} - 2\sqrt{2*4} + \sqrt{2}$$
$$= 3\sqrt{2} - 2\sqrt{2}*2 + \sqrt{2}$$
$$= 3\sqrt{2} - 4\sqrt{2} + \sqrt{2}$$
$$= 0$$

c)

$$\sqrt{6} + \sqrt{54} - \sqrt{24} = \sqrt{2*3} + \sqrt{9*6} - \sqrt{4*6}$$
$$= \sqrt{2*3} + 3\sqrt{2*3} - 2\sqrt{2*3}$$
$$= 2\sqrt{2*3}$$
$$= 2\sqrt{6}$$

1.196

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$$= 2\sqrt{2*3}$$
$$= 2\sqrt{6}$$