

a)

$$= \frac{(\frac{14}{10} * \frac{5}{7})^{-6} + 5^1 + 7^1}{3^{2*1.5} - \sqrt{49}} = \frac{1 + 5 + 7}{27 - 7} = \frac{13}{20}$$

b)

$$= \frac{36 - 11}{6 - \sqrt{11} - 2\sqrt{(6 - \sqrt{11})(6 + \sqrt{11}) + 6 + \sqrt{11}}} = \frac{25}{12 - 2\sqrt{36 - 11}} = \frac{25}{12 - 2 * 5} = \frac{25}{2} = 12.5$$

c)

$$= \frac{1}{[(3 - \sqrt{5})^{\frac{1}{2}} + (3 + \sqrt{5})^{\frac{1}{2}}]^2} * \left[\sqrt[3]{\frac{27}{8}} - 1 \right] = \frac{1}{3 - \sqrt{5} + 2\sqrt{(3 - \sqrt{5})(3 + \sqrt{5}) + 3 + \sqrt{5}}} * \left[\frac{3}{2} - 1 \right]$$

$$= \frac{1}{6 + 2\sqrt{9 - 5}} * \frac{1}{2} = \frac{1}{6 + 2 * 2} * \frac{1}{2} = \frac{1}{20}$$