1)

$$X = \sqrt{\frac{cd}{b}}$$
$$c = 0,7568 \pm 0,0002$$
$$d = 21,7 \pm 0,02$$
$$b = 2,65 \pm 0,01$$

$$X = \sqrt{\frac{0,7568 \cdot 21,7}{2,65}} = 2,49$$
$$\frac{\Delta X}{X} = \frac{1}{2} \cdot \left(\frac{\Delta c}{c} + \frac{\Delta d}{d} + \frac{\Delta b}{b} \right)$$
$$\frac{\Delta c}{c} = \frac{0,0002}{0,7568} = 0,00027$$
$$\frac{\Delta d}{d} = \frac{0,02}{21,7} = 0,00093$$
$$\frac{\Delta b}{b} = \frac{0,01}{2,65} = 0,00378$$
$$\frac{\Delta X}{X} = \frac{1}{2} \cdot (0,00027 + 0,00093 + 0,00378) = 0,00498$$
$$\Delta X = \frac{\Delta X}{X} \cdot X = 0,00498 \cdot 2,49 = 0,02$$
$$X = 2,49 \pm 0,02$$

2)

$$X = \frac{\sqrt[3]{a-b}}{m(n-a)}$$
$$a = 10,82 \pm 0,03$$
$$b = 2,786 \pm 0,0006$$
$$m = 0,28 \pm 0,006$$
$$n = 14,7 \pm 0,06$$

$$X = \frac{\sqrt[3]{10,82 - 2,786}}{0,28 \cdot (14,7 - 10,82)} = 1,84$$
$$\frac{\Delta X}{X} = \frac{\Delta a + \Delta b}{3(a-b)} + \frac{\Delta m}{m} + \frac{\Delta n + \Delta a}{n-a}$$

$$\frac{\Delta X}{X} = \frac{0,03 + 0,0006}{3(10,82 - 2,786)} + \frac{0,006}{0,28} + \frac{0,06 + 0,03}{14,7 - 10,82} =$$
$$= 0,00127 + 0,02143 + 0,02319 = 0,04589$$
$$\Delta X = \frac{\Delta X}{X} \cdot X = 0,04589 \cdot 1,84 = 0,08$$
$$\boxed{X = 1,84 \pm 0,08}$$

3)

$$\boxed{\begin{aligned} &X = \sqrt{p(p-a)(p-b)(p-c)}, \\ &p = \frac{a+b+c}{2} \\ &a = 46,3 \\ &b = 29,72 \\ &c = 37,654 \end{aligned}}$$
$$p = \frac{46,3 + 29,72 + 37,654}{2} = 56,84$$
$$X = \sqrt{56,84 \cdot (56,84 - 46,3) \cdot (56,84 - 29,72) \cdot (56,84 - 37,654)} =$$
$$= \sqrt{311722,97} = 558$$
$$\boxed{X = 558}$$