

1. a.) $\sqrt{\frac{16}{x^{16}}} = \frac{4}{x^8} \quad \parallel_2$

b.) $\sqrt{0,64x^6y^4} = \underline{0,8x^3y^2} \quad \parallel_2$

c.) $\sqrt{12} \cdot \sqrt{27} = \sqrt{12 \cdot 27} = \sqrt{324} = \underline{18} \quad \parallel_2$

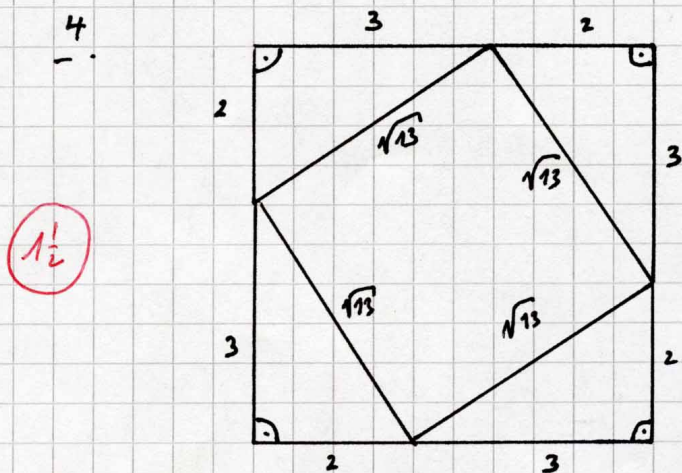
3. d.) $\sqrt{\frac{9x}{5}} : \sqrt{5x^3} = \sqrt{\frac{9x}{5} : \frac{5x^3}{1}} = \sqrt{\frac{9x^1}{5} \cdot \frac{1}{5x^3}} = \sqrt{\frac{9}{25x^2}} = \underline{\frac{3}{5x}} \quad \parallel_2$

e.) $\sqrt{0,22} : \sqrt{\frac{2}{9}} = \sqrt{\frac{22}{100} : \frac{2}{9}} = \sqrt{\frac{22}{25} \cdot \frac{9}{2}} = \sqrt{\frac{26}{25}} = \underline{\frac{6}{5}} \quad \parallel_2$

f.) $\sqrt{2} : (\sqrt{2xy^3} \cdot \sqrt{\frac{x}{4y^5}}) = \sqrt{2} : (\sqrt{\frac{2xy^3}{1} \cdot \frac{x}{4y^5}}) =$
 $\sqrt{2} : (\sqrt{\frac{x^2}{2y^2}}) = \sqrt{\frac{2}{1} : \frac{x^2}{2y^2}} = \sqrt{\frac{2}{1} \cdot \frac{2y^2}{x^2}} = \underline{\frac{2y}{x}} \quad \parallel_2$

1. 2. $a^2 = (0,2x^4 \cdot \sqrt{50x^4})^2 = 0,04x^8 \cdot 50x^4 = \underline{2x^{12}} \quad \parallel_1$

1. 3. $\underline{99} < \sqrt{9'999} < 100 \quad \parallel_1$



① 5. $d = \sqrt{2} \cdot s = \sqrt{2} \cdot \sqrt{18 \text{ cm}} = \sqrt{36} \text{ cm} = \underline{\underline{6 \text{ cm}}}$ 1

6. a.) f $\frac{1}{4}$ b.) ✓ $\frac{1}{4}$

① 12. c.) ✓ $\frac{1}{4}$ d.) ✓ $\frac{1}{4}$

e.) ✓ $\frac{1}{4}$ f.) f $\frac{1}{4}$

7. $b = A : a$

$$= (\sqrt{20} \cdot x^2) : (\sqrt{45} \cdot x)$$

①
$$= \frac{\sqrt{20} \cdot \cancel{x^2}^x}{\sqrt{45} \cdot \cancel{x}^1} = \sqrt{\frac{20}{45}} \cdot x = \sqrt{\frac{4}{9}} \cdot x = \underline{\underline{\frac{2}{3} \cdot x}}$$
 1

10 Pkt