

$$x = a/b, y = c/d, \sqrt{\dots} = q$$

$$q^2 = 1 + 2\frac{a^3c}{b^3d} + \frac{ac^2}{bd^2} = \frac{b^3d^2 + 2a^3cd + ab^2c^2}{b^3d^2} * \frac{b}{b}$$

$$= \frac{1}{(b^2d)^2} (b^4d^2 + 2a^3bcd + ab^3c^2); a = m^2, b = n^2$$

$$() (n^8d^2 + 2m^6n^2cd + m^2n^6c^2)$$

$$\text{Vollst. Quadrat wenn } m^6n^2cd = n^4d * mn^3c = n^7mcd$$

$$\text{also } m^5 = n^5$$