


$$2\frac{3}{5} = \frac{8+3}{5} = \frac{11}{5}$$



$$2\frac{1}{5}$$

$$\frac{5}{6} = \frac{2}{3}$$

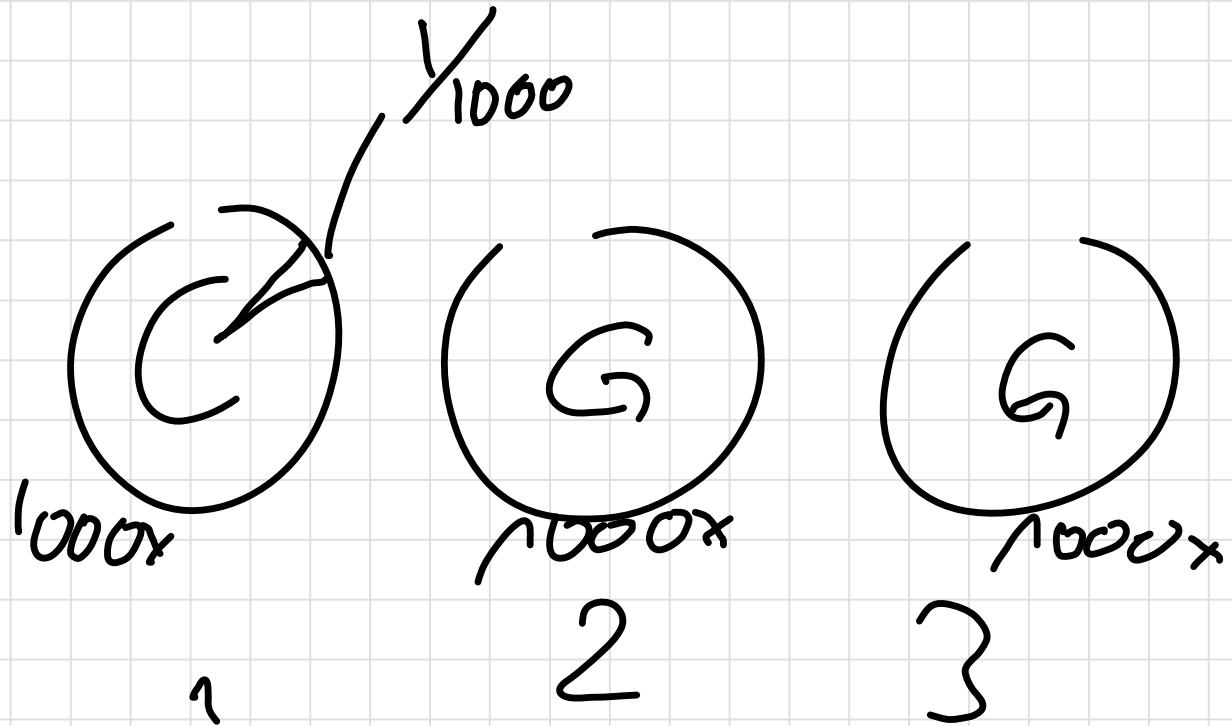
$$\frac{3a + a^2}{2a + a^4} = \frac{\cancel{a}(3+a)}{\cancel{a}(2+a^3)} = \frac{3+a}{2+a^3}$$

$$\frac{3}{5} + \frac{2}{5} = \frac{15 + \cancel{10} + 8}{20} = \frac{23}{20}$$

$$\frac{b}{\cos(x)} + \frac{\sqrt{y+1}}{c}$$

$$= \frac{bc + (\sqrt{y+1})\cos(x)}{\cos(x) \cdot c}$$

$$\frac{3}{\frac{1}{1000}} = 3000$$



$$\frac{3}{5} \cdot \frac{2}{5} = \frac{3}{5} \cdot \frac{5}{2} = \frac{15}{8}$$

(

$$\frac{3}{5} \cdot \frac{1}{2}$$

$$\frac{a + b^2}{x + 1} \quad (13)$$

$$\frac{x + 1}{x + 1} \quad (42)$$

||

$$\frac{\sqrt{c}}{x + 1} \quad 3$$

$$\frac{5x(x) \quad 98}{x + 1}$$

$$\frac{a + b^2}{x + 1}$$

$$\frac{x + 1}{x + 1}$$

$$(13)$$

$$(42)$$

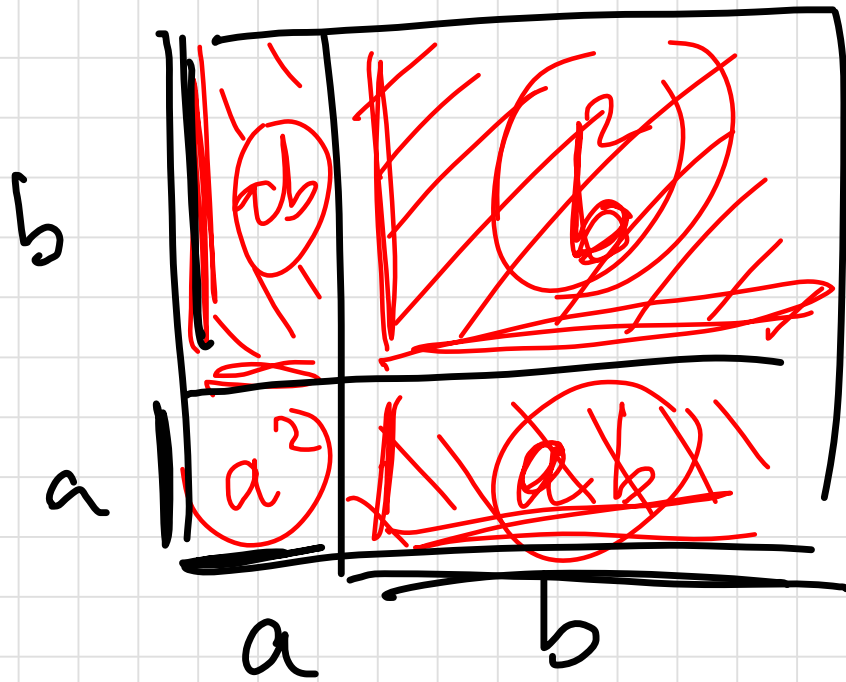
$$\frac{5x(x)}{x + 1}$$

$$\frac{\sqrt{c}}{x + 1}$$

$$(98)$$

$$(3)$$

$$(a+b)^2 = a^2 + 2ab + b^2$$

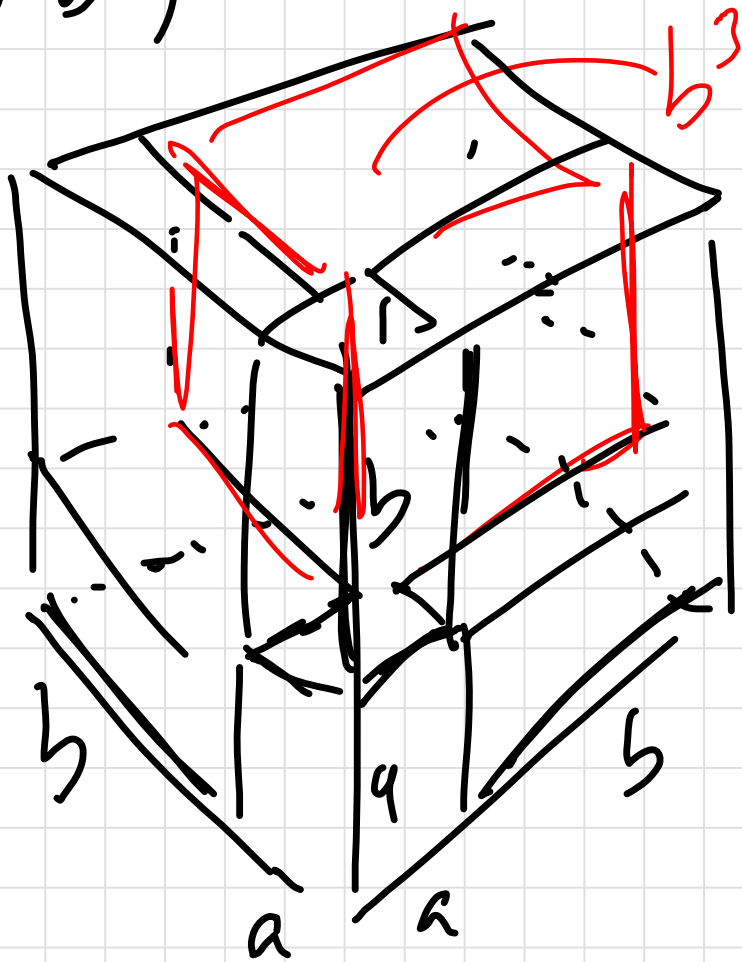


gesamte
Fläche

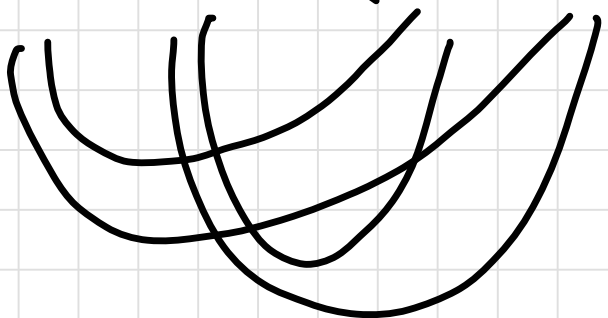
$$= (a+b)^2$$

$$= a^2 + 2ab + b^2$$

$$(a+b)^3 = \text{Volumen}$$



$$a^3 + 3a^2b + 3ab^2 + b^3$$

$$(a+b)(a-b) = a^2 - \cancel{ab} + \cancel{ba} - b^2$$

$$= a^2 - b^2$$

Prozent, Promille, ppm
%, ‰, ppm

2‰ von 3kg :

$$2 \cdot \frac{3\text{kg}}{1000} = 2 \cdot 3\text{g} = 6\text{g}$$

$$42 \text{ g} = x \% \text{ von } 3 \text{ kg}$$

$$= x \cdot \frac{3 \text{ kg}}{100}$$

$$= x \cdot \frac{3000 \text{ g}}{100}$$

$$\Rightarrow x = \frac{42 \text{ g}}{30 \text{ g}} = \dots$$

Proportionalität

Fahre mit 100 km/h

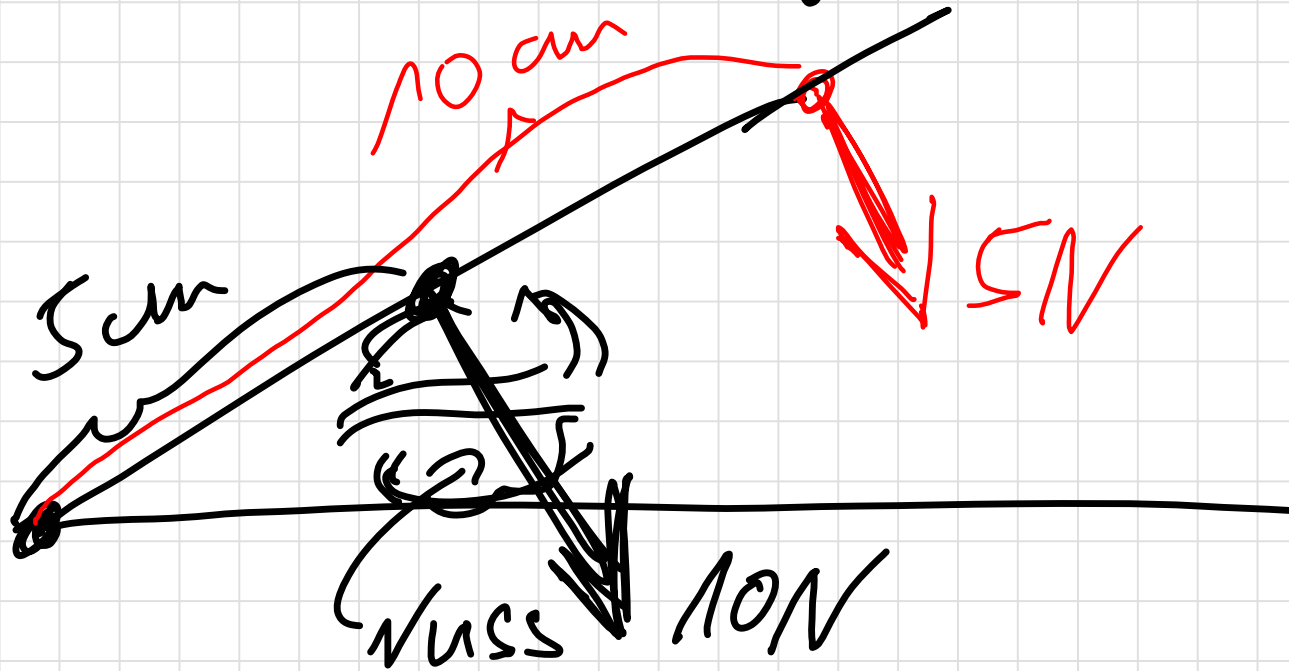
nach 1h = 100 km

nach 2h = 200 km

nach 4h = 400 km

Strecke / Zeit = const

Indirekte Proportionalität



$$\text{Strecke} \cdot \text{Kraft} = \text{const}$$

$\frac{1}{2} \cdot \frac{1}{2}$