

$$\begin{array}{l}
 1. \quad 2. \quad 3. \\
 2x \quad x \\
 2x - 400 \quad x - 400 \quad 1,5 \cdot (2x - 400) \\
 \text{celkem } 15 \text{ m}^3 = 13000 \text{ dm}^3 = 13000 \text{ l} \\
 1. \quad 13000 - 2x - x = 13000 - 3x \\
 2. \quad 2x - 400
 \end{array}$$

$$\begin{aligned}
 2x - 400 + x - 400 + 1,5(2x - 400) &= 13000 - 1000 \\
 3x - 800 + 3x - 600 &= 11800 \\
 6x - 1400 &= 11800 \\
 6x &= 13200 \quad | :6 \\
 x &= 2200 \text{ l}
 \end{aligned}$$

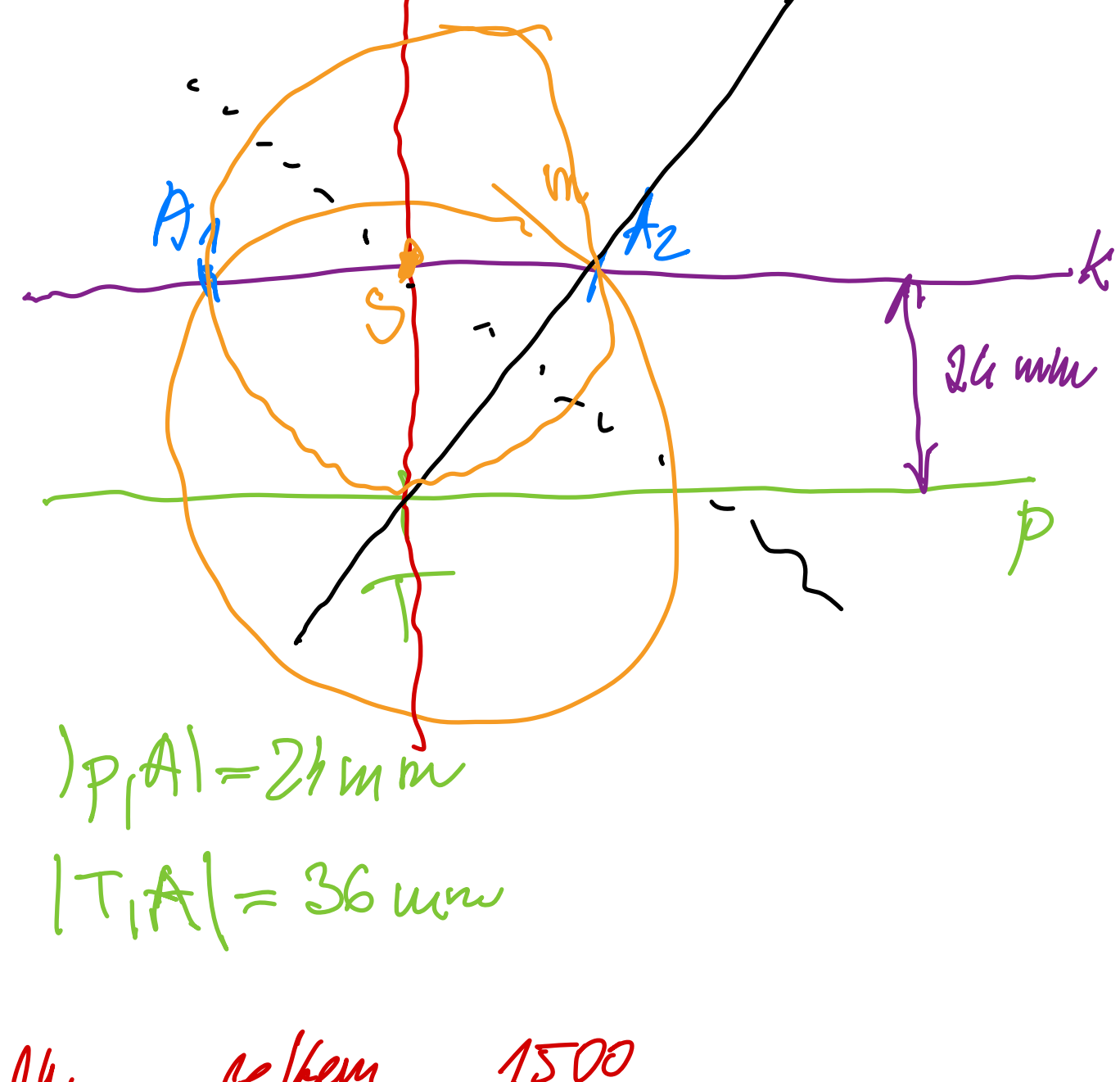
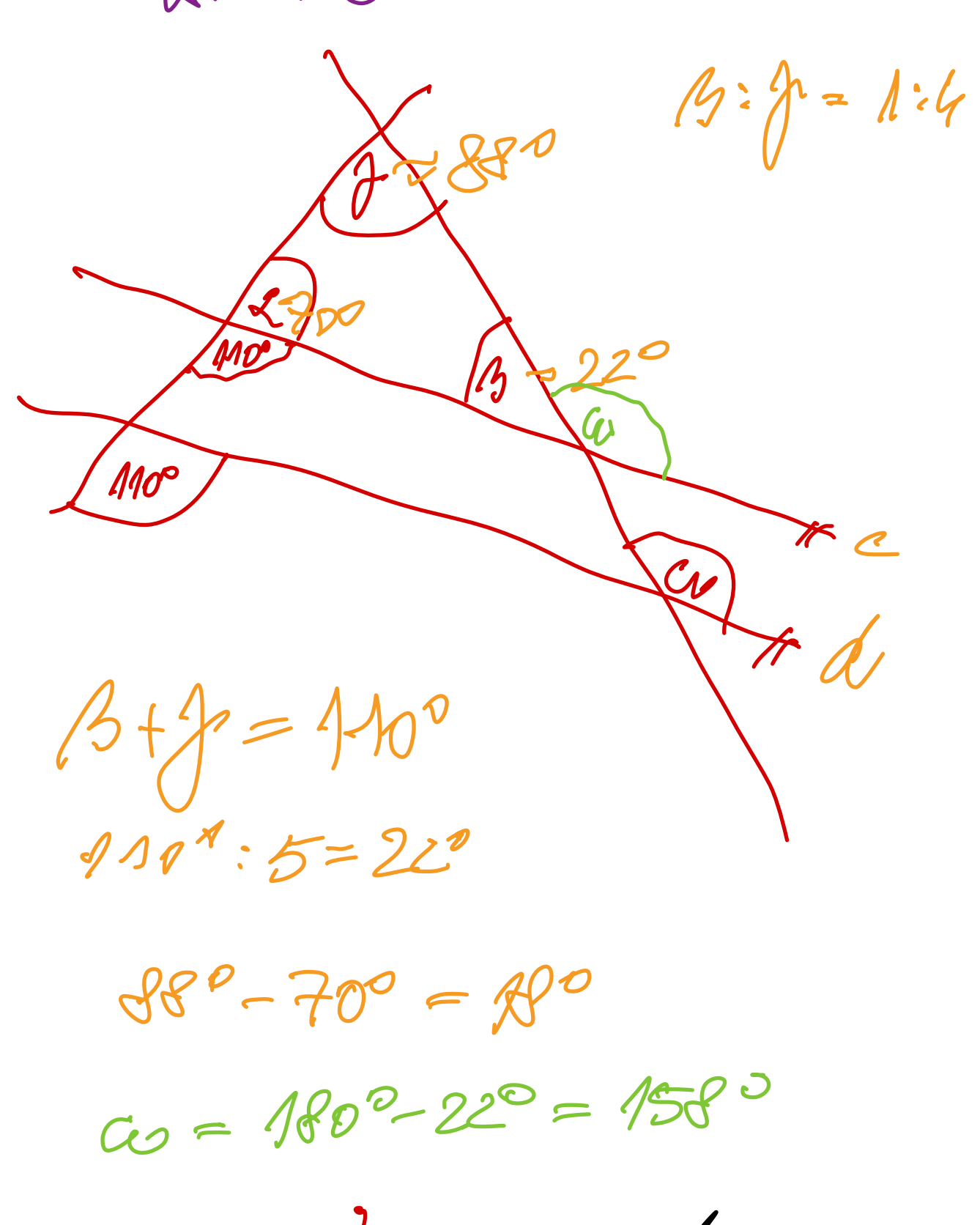
3. $2200 - 400 = 1800 \text{ p}$

	2. SMIL	2. SKML	KOLEC
T	40	12	4
V	30	5	2
L	25	x	4x

$$\begin{aligned}
 \frac{5}{9}x &= 40 \quad | \cdot 9 \\
 5x &= 360 \quad | :5 \\
 x &= 72
 \end{aligned}$$

$$\begin{aligned}
 25 - x + 4x &= 40 \\
 25 + 3x &= 40 \\
 3x &= 15 \quad | :3 \\
 x &= 5
 \end{aligned}$$

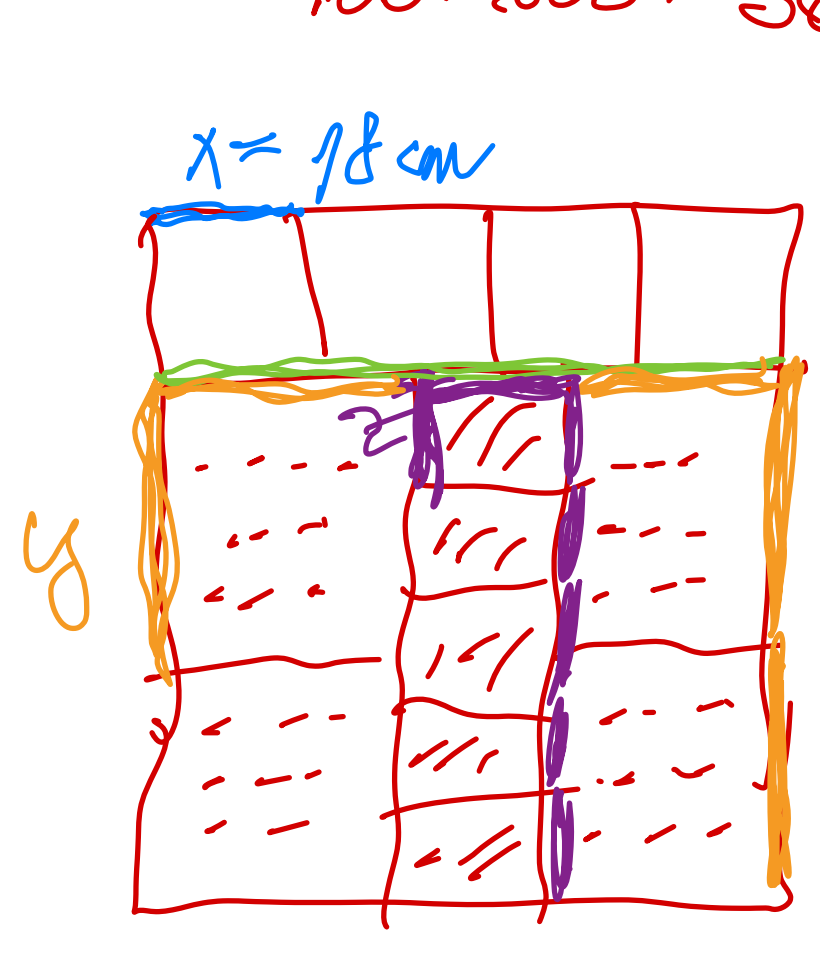
- 6
- 20



14. celkem 1500
 odměna 270 100% ... 1500
 20% 1500 - x 1% ... 1500 : 100 = 15
 mzdi x 18% ... 18 · 15 = 270

$$\begin{aligned}
 0,16 \cdot x + 0,21 \cdot (1500 - x) &= 270 \quad | \cdot 100 \\
 16x + 21(1500 - x) &= 27000 \\
 16x + 31500 - 21x &= 27000 \\
 -5x &= -4500 \quad | : (-5) \\
 x &= 900
 \end{aligned}$$

mzdi = 900
 zeny = 1500 - 900 = 600
 900 - 600 = 300

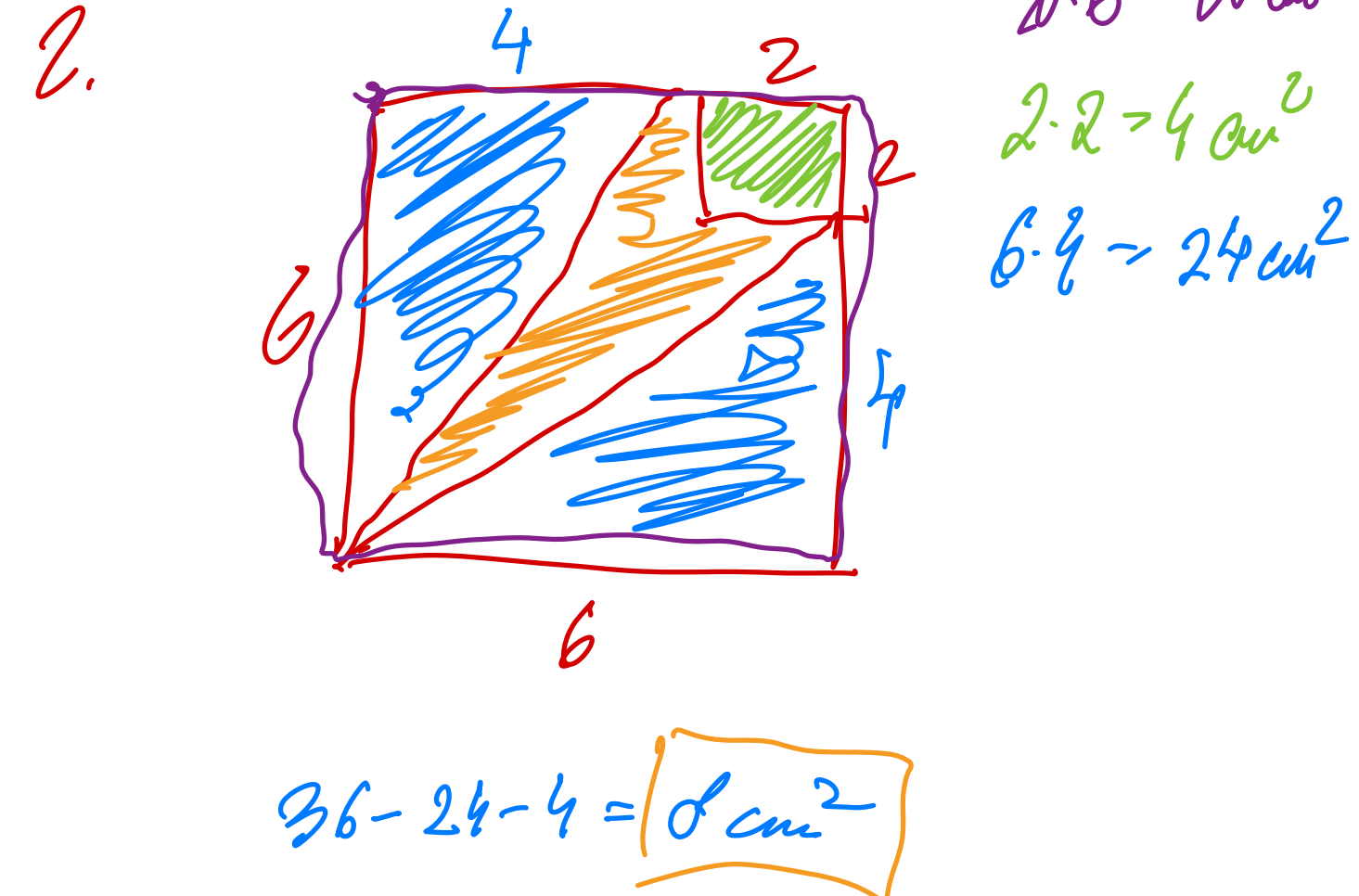


$$\begin{aligned}
 2y + z &= 72 \\
 2y &= 5z \\
 5z + z &= 72 \\
 6z &= 72 \quad | :6 \\
 z &= 12 \text{ cm} \\
 y &= 4 \cdot z = 4 \cdot 12 = 48 \text{ cm}
 \end{aligned}$$

13

$V = a \cdot b \cdot c$

$$\begin{aligned}
 15 \text{ l} &\dots 18 \\
 900 \text{ l} &\dots 60 \text{ s} = 1 \text{ min} \\
 54000 \text{ l} &\dots 60 \text{ min} = 1 \text{ h} \\
 540000 \text{ l} &\dots 10 \text{ h} \\
 V = 540000 \text{ l} &= 540000 \text{ dm}^3 = 540 \text{ m}^3 \\
 V &= a \cdot b \cdot c \\
 540 &= 30 \cdot 9 \cdot c \\
 540 &= 270 \cdot c \quad | :270 \\
 \frac{540}{270} &= c \\
 2 \text{ m} &= c
 \end{aligned}$$



$$\begin{aligned}
 4.1. \quad (3+2n)(3+2n) - (3-2n) &= (a+b)^2 = a^2 + 2ab + b^2 \\
 &= 3^2 + 12n + (2n)^2 - 3 + 2n = \\
 &= 9 + 12n + 4n^2 - 3 + 2n = \\
 &= 4n^2 + 14n - 6 \\
 4.2. \quad 2 \cdot 2,5a^2 - 2a(-a) - 3^2a &= \\
 &= 5a^2 + 2a^2 - 9a = 7a^2 - 9a = \\
 &= a(7a - 9) \\
 4.3. \quad (3x-1)(2x-5) - (2x-4) \cdot (3x+1) &= \\
 &= 6x^2 - 15x - 2x^2 + 5x - (6x^2 + 2x - 12x - 4) = \\
 &= 11x^2 - 15x - 2x^2 - 6x^2 - 2x + 12x + 4 = \\
 &= -8x^2 + 29x + 4
 \end{aligned}$$