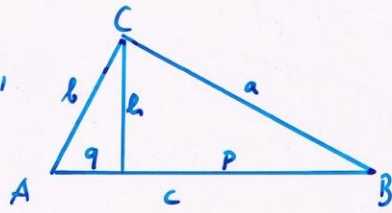


Mathematik \* Klasse 9d \* Hausaufgaben-Lösung

S. 43/3d,



geg.:  $c = 250 \text{ m}$

$q = 6,25 \text{ dm} = 0,625 \text{ m}$

gesucht: Rest und  $A = a \cdot b \cdot \frac{1}{2}$

$p = c - q = 249,375 \text{ m}$       $b^2 = cq \Rightarrow b = \sqrt{250 \cdot 0,625} \text{ m} = 12,5 \text{ m}$

$a^2 = c \cdot p \Rightarrow a = \sqrt{250 \cdot 249,375} \text{ m} = \frac{25 \cdot \sqrt{399}}{2} \text{ m} \approx 249,69 \text{ m}$

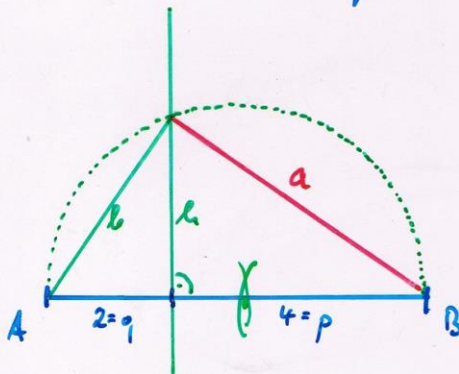
$A = \frac{1}{2} \cdot a \cdot b = \frac{1}{2} \cdot \frac{25}{2} \sqrt{399} \cdot 12,5 \text{ m}^2 = \frac{625}{8} \cdot \sqrt{399} \text{ m}^2 \approx 1560,55 \text{ m}^2$

$A = \frac{1}{2} c \cdot h \Rightarrow h = \frac{2A}{c} = \frac{a \cdot b}{c} = \frac{625 \cdot \sqrt{399}}{4 \cdot 8 \cdot 250} \text{ m} = \frac{5}{256} \sqrt{399} \text{ m} \approx 6,44 \text{ m}$

S. 44/8c, Konstruiere eine Strecke der Länge  $\sqrt{24} \text{ cm}$

Verwende  $a^2 = p \cdot c$  mit  $c = 6 \text{ cm}$  und  $p = 4 \text{ cm}$ ,

denn dann gilt  $a = \sqrt{p \cdot c} = \sqrt{4 \cdot 6} \text{ cm} = \sqrt{24} \text{ cm}$



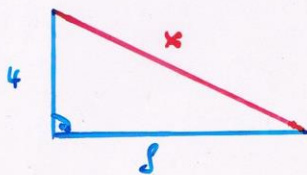
$a = \sqrt{24} \text{ cm} = 2\sqrt{6} \text{ cm}$

$\approx 4,89897... \text{ cm}$

$\approx 4,90 \text{ cm}$

$1 \text{ LE} \hat{=} 1 \text{ cm}$

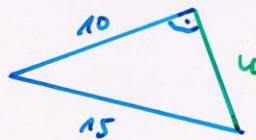
S. 46/4



$x^2 = 4^2 + 8^2 = 80$

$x = \sqrt{80} = 4 \cdot \sqrt{5}$

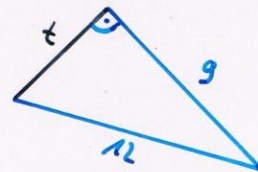
$(x \approx 8,94)$



$u^2 = 15^2 - 10^2$

$u^2 = 125$

$u = 5\sqrt{5} \approx 11,18$



$t^2 = 12^2 - 9^2$

$t^2 = 63$

$t = 3\sqrt{7} \approx 7,94$