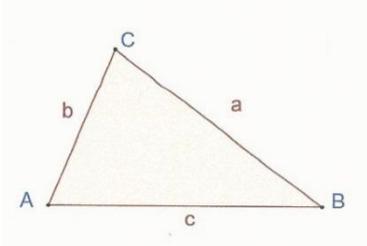
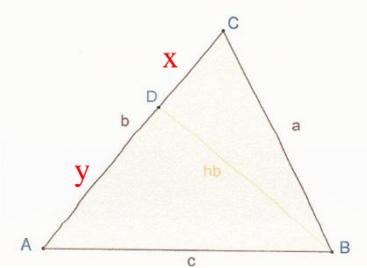
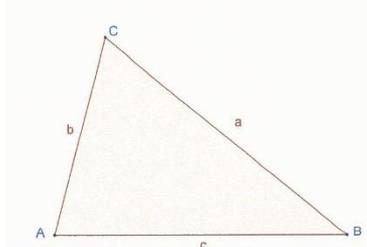


Trigonometrie – Berechnungen in schiefwinkligen Dreiecken

Arbeitsblatt 2

Berechnen Sie in folgenden Beispielen die gesuchten Größen!

 <p>Cosinussatz für die Berechnung der Winkel!</p>	<p>▲ <u>ABC: $a = 40 \text{ dm}$, $b = 26 \text{ dm}$, $c = 42 \text{ dm}$; gesucht: α, β, γ und A!</u></p> $a^2 = b^2 + c^2 - 2 \cdot b \cdot c \cdot \cos \alpha$						
 <p>Sinussatz! Pythagoreischer Lehrsatz In den ▲ BCD und ABD!</p>	<p>▲ <u>ABC: $b = 56 \text{ m}$, $h_b = 45 \text{ m}$, $\gamma = 65^\circ$; gesucht: a, c, α, β und A!</u></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border-right: 1px solid black; padding: 5px;">$x^2 = a^2 - h_b^2$</td> <td style="border-right: 1px solid black; padding: 5px;">$c^2 = y^2 + h_b^2$</td> <td style="padding: 5px;">$\sin \alpha = \frac{h_b}{c}$</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">$y = b - x$</td> <td style="padding: 5px;"></td> <td style="padding: 5px;">$A =$</td> </tr> </table>	$x^2 = a^2 - h_b^2$	$c^2 = y^2 + h_b^2$	$\sin \alpha = \frac{h_b}{c}$	$y = b - x$		$A =$
$x^2 = a^2 - h_b^2$	$c^2 = y^2 + h_b^2$	$\sin \alpha = \frac{h_b}{c}$					
$y = b - x$		$A =$					
 <p>Cosinussatz!</p>	<p>▲ <u>ABC: $a = 75 \text{ cm}$, $b = 50 \text{ cm}$, $\gamma = 65^\circ$; gesucht: α, β, c und A!</u></p> $c^2 = a^2 + b^2 - 2 \cdot a \cdot b \cdot \cos \gamma$ <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border-right: 1px solid black; padding: 5px;">$\frac{a}{\sin \alpha} = \frac{c}{\sin \gamma}$</td> <td style="padding: 5px;">$A =$</td> </tr> </table>	$\frac{a}{\sin \alpha} = \frac{c}{\sin \gamma}$	$A =$				
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