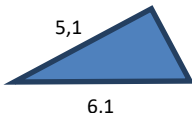
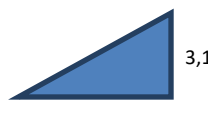
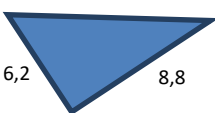
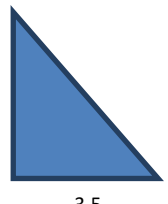
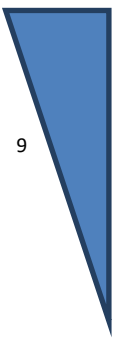
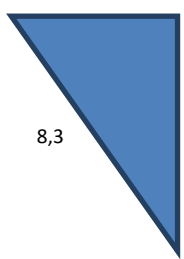


Seiten in rechth. Dreiecken berechnen

Lösungsblatt

Aufgaben:

Berechne die fehlenden **Seitenlängen** der rechtwinkligen Dreiecke mit Hilfe des pythagoräischen Lehrsatzes! (Alle Maße sind in cm! Runde jeweils auf 1 Kommastelle!)

<p>1.</p> <div style="text-align: right; margin-bottom: 10px;">  </div> <p>Gesuchte Seite: Kathete</p> $x = \sqrt{6,1^2 - 5,1^2}$ $x = \sqrt{37,21 - 26,01}$ $x = \sqrt{11,2}$ <p>$x = 3,3 \text{ cm}$</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr><td style="padding: 2px 5px;">B</td><td style="padding: 2px 5px;">3,3 cm</td></tr> <tr><td style="padding: 2px 5px;">A</td><td style="padding: 2px 5px;">3,7 cm</td></tr> </table>	B	3,3 cm	A	3,7 cm	<p>2.</p> <div style="text-align: right; margin-bottom: 10px;">  </div> <p>Gesuchte Seite: Hypotenuse</p> $x = \sqrt{5,6^2 + 3,1^2}$ $x = \sqrt{31,36 + 9,61}$ $x = \sqrt{40,97}$ <p>$x = 6,4 \text{ cm}$</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr><td style="padding: 2px 5px;">E</td><td style="padding: 2px 5px;">6,4 cm</td></tr> <tr><td style="padding: 2px 5px;">N</td><td style="padding: 2px 5px;">5,8 cm</td></tr> </table>	E	6,4 cm	N	5,8 cm
B	3,3 cm								
A	3,7 cm								
E	6,4 cm								
N	5,8 cm								
<p>3.</p> <div style="text-align: right; margin-bottom: 10px;">  </div> <p>Gesuchte Seite: Hypotenuse</p> $x = \sqrt{6,2^2 + 8,8^2}$ $x = \sqrt{38,44 + 77,44}$ $x = \sqrt{115,88}$ <p>$x = 10,8 \text{ cm}$</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr><td style="padding: 2px 5px;">K</td><td style="padding: 2px 5px;">12,4 cm</td></tr> <tr><td style="padding: 2px 5px;">R</td><td style="padding: 2px 5px;">10,8 cm</td></tr> </table>	K	12,4 cm	R	10,8 cm	<p>4.</p> <div style="text-align: right; margin-bottom: 10px;">  </div> <p>Gesuchte Seite: Hypotenuse</p> $x = \sqrt{4,9^2 + 3,5^2}$ $x = \sqrt{24,01 + 12,25}$ $x = \sqrt{36,26}$ <p>$x = 6 \text{ cm}$</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr><td style="padding: 2px 5px;">L</td><td style="padding: 2px 5px;">6 cm</td></tr> <tr><td style="padding: 2px 5px;">A</td><td style="padding: 2px 5px;">7 cm</td></tr> </table>	L	6 cm	A	7 cm
K	12,4 cm								
R	10,8 cm								
L	6 cm								
A	7 cm								
<p>5.</p> <div style="text-align: right; margin-bottom: 10px;">  </div> <p>Gesuchte Seite: Kathete</p> $x = \sqrt{9^2 - 2,6^2}$ $x = \sqrt{81 - 6,76}$ $x = \sqrt{74,24}$ <p>$x = 8,6 \text{ cm}$</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr><td style="padding: 2px 5px;">I</td><td style="padding: 2px 5px;">8,6 cm</td></tr> <tr><td style="padding: 2px 5px;">R</td><td style="padding: 2px 5px;">8,8 cm</td></tr> </table>	I	8,6 cm	R	8,8 cm	<p>6.</p> <div style="text-align: right; margin-bottom: 10px;">  </div> <p>Gesuchte Seite: Kathete</p> $x = \sqrt{8,3^2 - 5^2}$ $x = \sqrt{68,89 - 25}$ $x = \sqrt{43,89}$ <p>$x = 6,6 \text{ cm}$</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr><td style="padding: 2px 5px;">A</td><td style="padding: 2px 5px;">6,3 cm</td></tr> <tr><td style="padding: 2px 5px;">N</td><td style="padding: 2px 5px;">6,6 cm</td></tr> </table>	A	6,3 cm	N	6,6 cm
I	8,6 cm								
R	8,8 cm								
A	6,3 cm								
N	6,6 cm								

Das **Lösungswort** ergibt eine europäische Hauptstadt: **B** **E** **R** **L** **I** **N**