Worksheet

08/28/2018

Free on dw-math.com
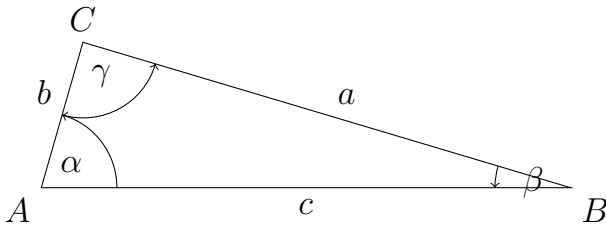
Problem quickname: 3913
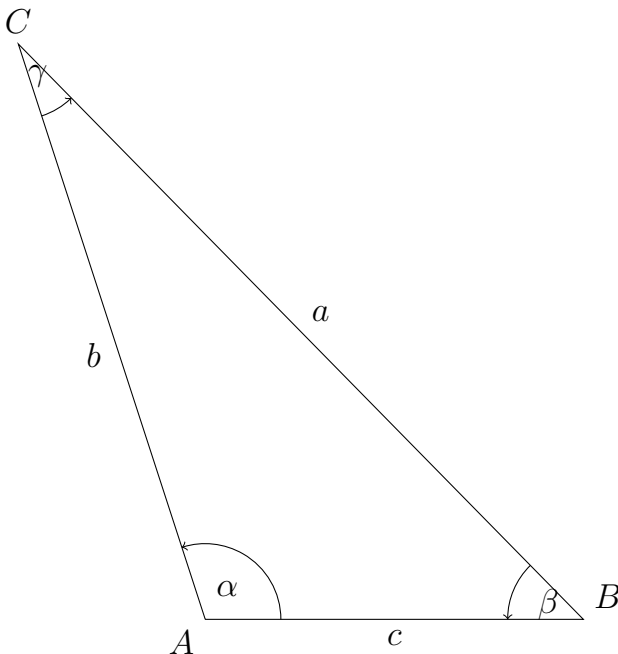
<u>1)</u>

Draw a triangle with the given dimensions. Measure the size of angles α, β and γ. Measure the lengths of the sides a, b and c.
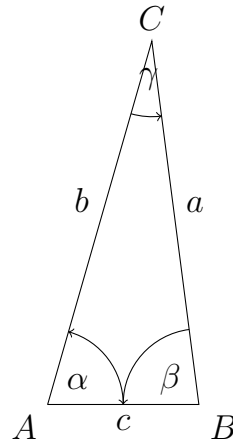
a) $b = 2$ cm, $\alpha = 74$ degrees, $c = 7$ cm
$a = 6.7$ cm, $b = 2$ cm, $c = 7$ cm
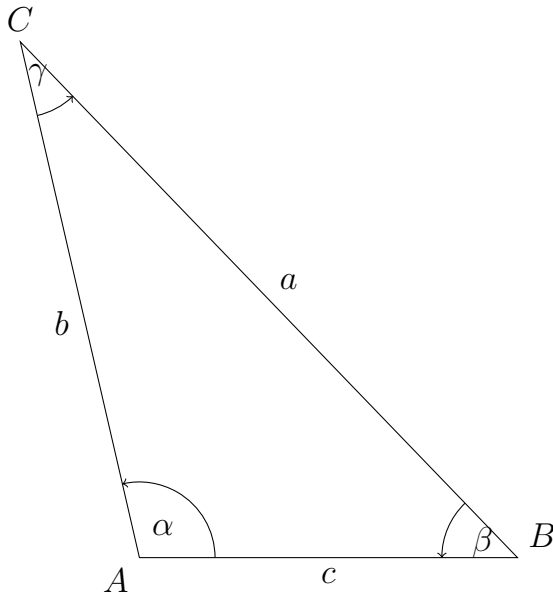$\alpha = 74$ degrees, $\beta = 17$ degrees, $\gamma = 89$ degrees

b) $a = 10.7$ cm, $\gamma = 26$ degrees, $b = 8$ cm
$a = 10.7$ cm, $b = 8$ cm, $c = 5$ cm
$\alpha = 108$ degrees, $\beta = 46$ degrees, $\gamma = 26$ degrees

c) $a = 4.8$ cm, $b = 5$ cm, $c = 2$ cm
$a = 4.8$ cm, $b = 5$ cm, $c = 2$ cm
$\alpha = 74$ degrees, $\beta = 83$ degrees, $\gamma = 23$ degrees

d) $\alpha = 103$ degrees, $c = 5$ cm, $\beta = 46$ degrees
$a = 9.5$ cm, $b = 7$ cm, $c = 5$ cm
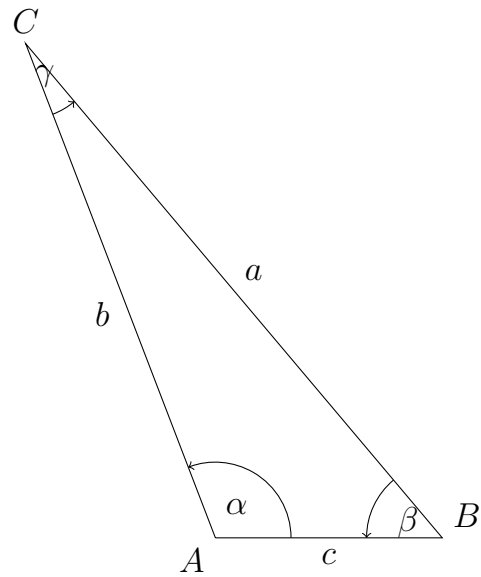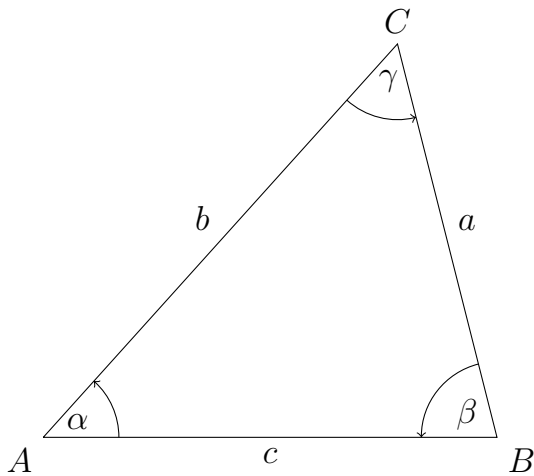$\alpha = 103$ degrees, $\beta = 46$ degrees, $\gamma = 31$ degrees

2)

Draw a triangle with the given dimensions. Measure the lengths of the sides a, b and c.
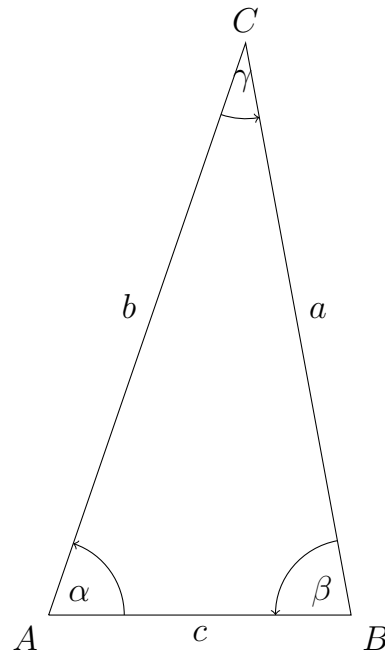
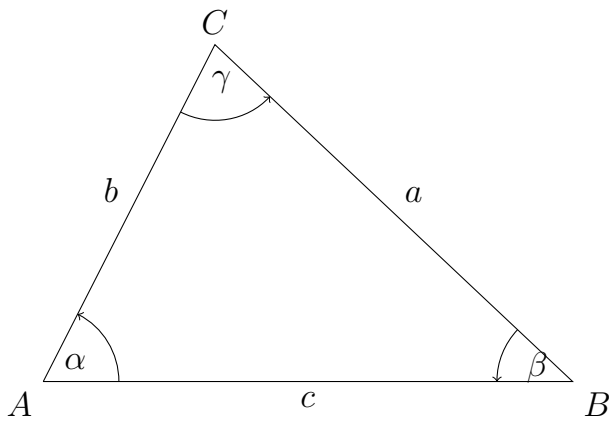a) $a = 8.5$ cm, $b = 7$ cm, $c = 3$ cm
$a = 8.5$ cm, $b = 7$ cm, $c = 3$ cm

b) β $=$ 76 degrees, a $=$ 5.4 cm,
$\gamma = 56$ degrees
$a = 5.4$ cm, $b = 7$ cm, $c = 6$ cm

c) $\gamma = 29$ degrees, $b = 8$ cm, $\alpha = 71$ degrees
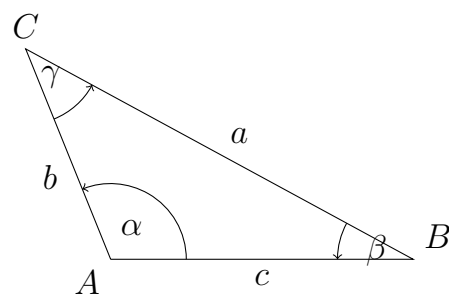 $a = 7.7$ cm, $b = 8$ cm, $c = 4$ cm

d) $\alpha = 63$ degrees, $c = 7$ cm, $\beta = 43$ degrees
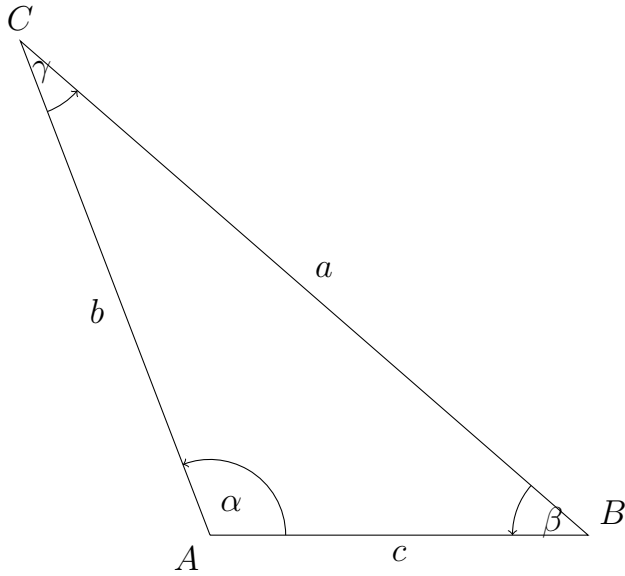 $a = 6.5$ cm, $b = 5$ cm, $c = 7$ cm

<u>3)</u>

Draw a triangle with the given dimensions. Measure the size of angles α, β and γ.

a) $b = 3$ cm, $\alpha = 112$ degrees, $c = 4$ cm
   $\alpha = 112$ degrees, $\beta = 28$ degrees, $\gamma = 40$ degrees
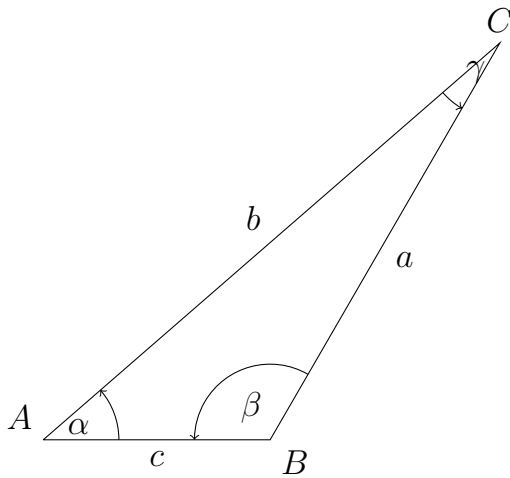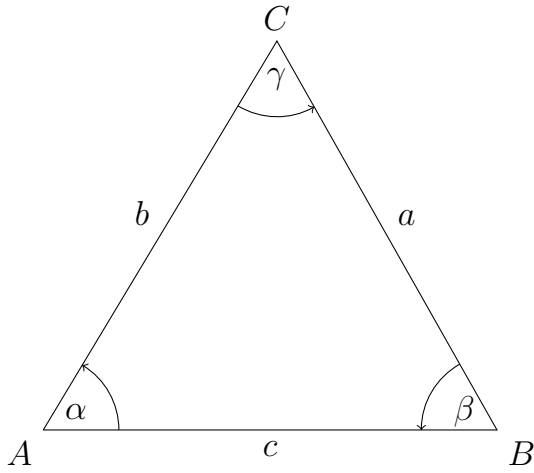
b) $b = 7$ cm, $\alpha = 111$ degrees, $c = 5$ cm
$\alpha = 111$ degrees, $\beta = 41$ degrees, $\gamma = 28$ degrees

c) $\gamma = 19$ degrees, $b = 8$ cm, $\alpha = 41$ degrees
$\alpha = 41$ degrees, $\beta = 120$ degrees, $\gamma = 19$ degrees

d) $\beta = 60$ degrees, $a = 5.9$ cm, $\gamma = 60$ degrees $\alpha = 59$ degrees, $\beta = 60$ degrees, $\gamma = 60$ degrees
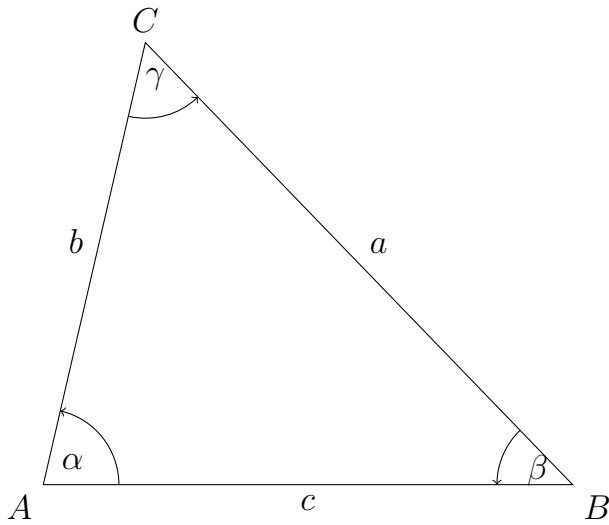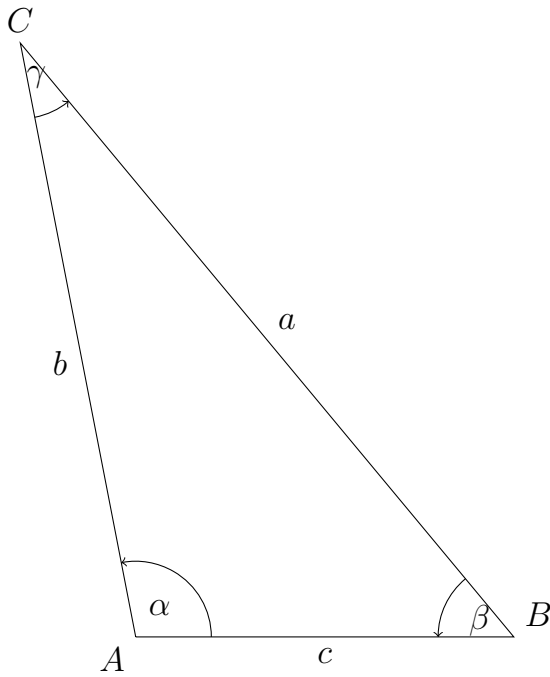
<u>4)</u>

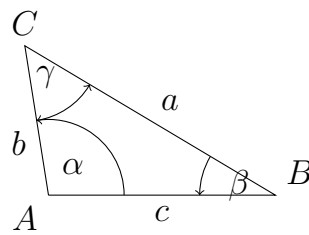Draw a triangle with the given dimensions. Measure the lengths of the sides a, b and c.

a) β = 46 degrees, a = 8.1 cm,
$\gamma = 57$ degrees
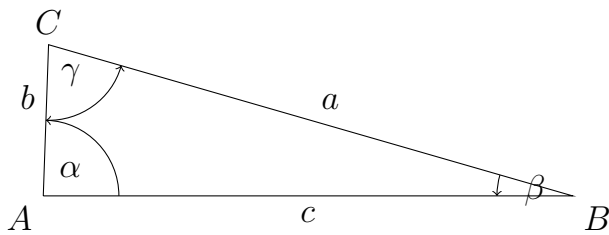$a = 8.1$ cm, $b = 6$ cm, $c = 7$ cm

b) β = 50 degrees, a = 10.2 cm,
$\gamma = 29$ degrees
$a = 10.2$ cm, $b = 8$ cm, $c = 5$ cm

Page 6

c) $\alpha = 99$ degrees, $c = 3$ cm, $\beta = 31$ degrees
$a = 3.9$ cm, $b = 2$ cm, $c = 3$ cm

d) $\alpha = 88$ degrees, $c = 7$ cm, $\beta = 16$ degrees
$a = 7.2$ cm, $b = 2$ cm, $c = 7$ cm

Good Luck!