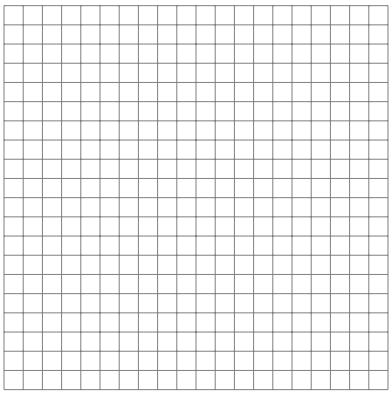
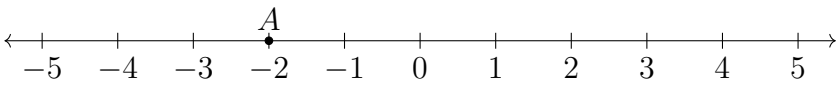
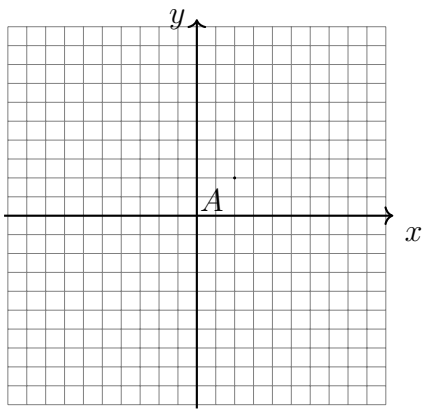
Graphs

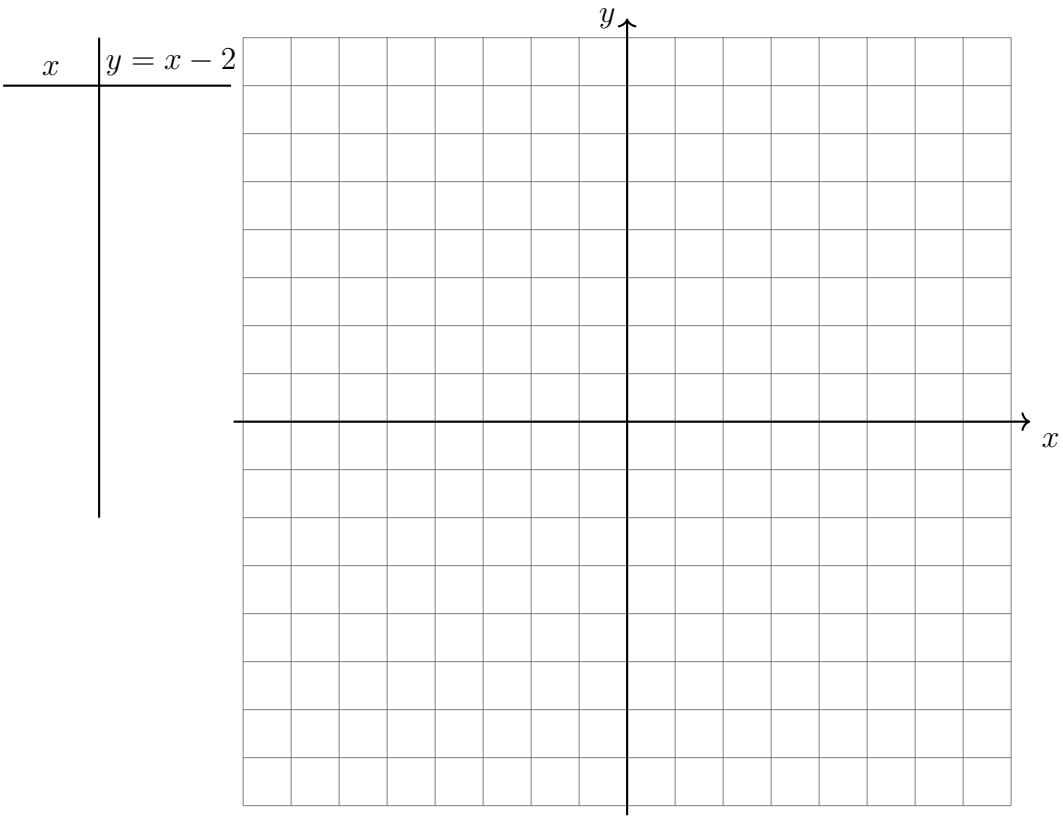
tikz grid command



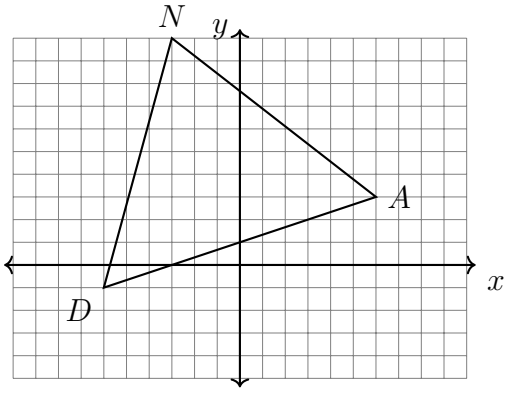
Axes







Triangle DAN is graphed on the set of axes below. The vertices of $\triangle DAN$ have coordinates $D(-6,-1), A(6,3),$ and $N(-3,10)$.



What is the area of $\triangle DAN$?

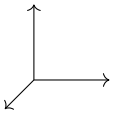
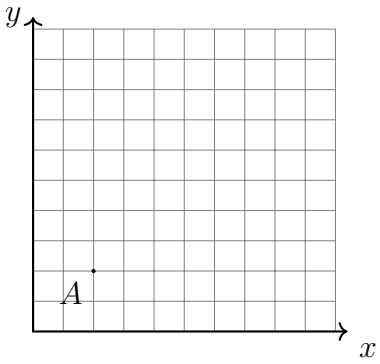
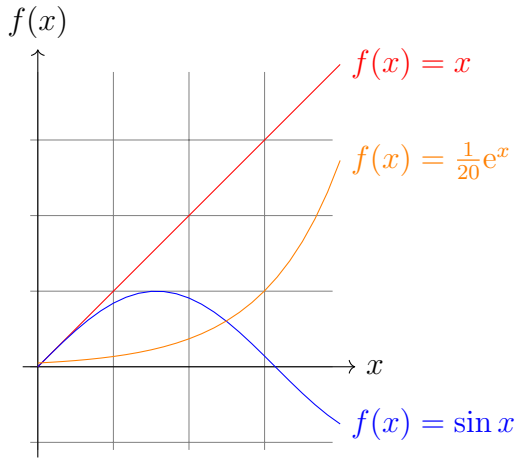


Figure 1: x and y axes for grid

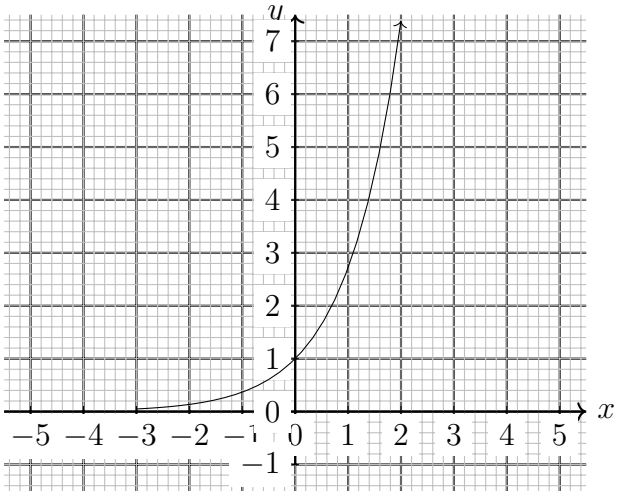


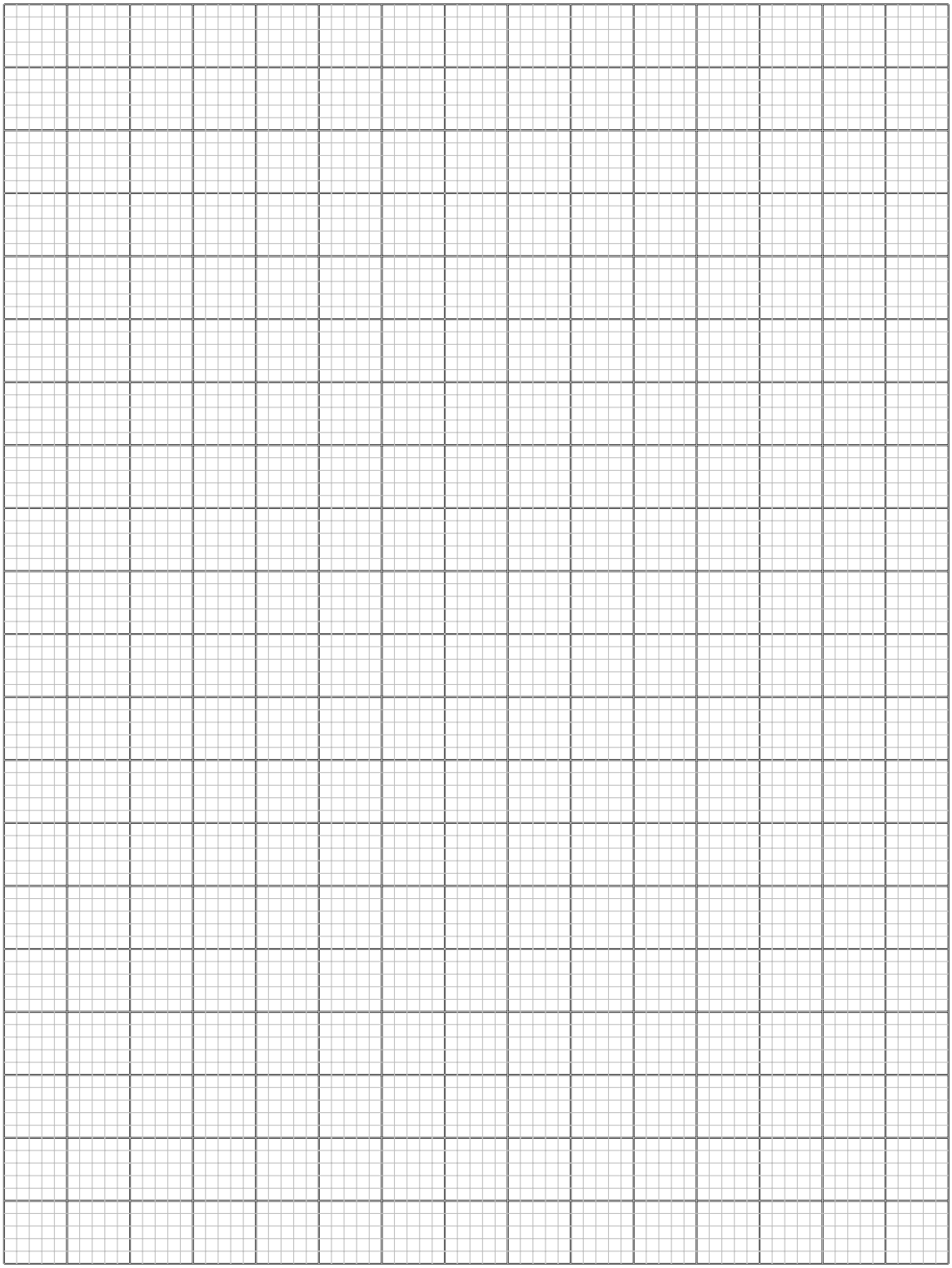
plot functions

Use brackets around expressions, especially those having parenthesis



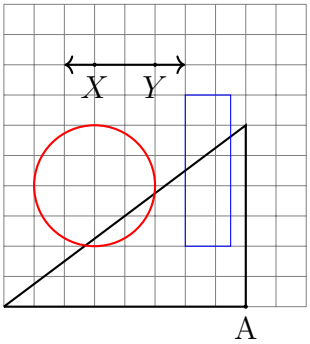
Axis numbering

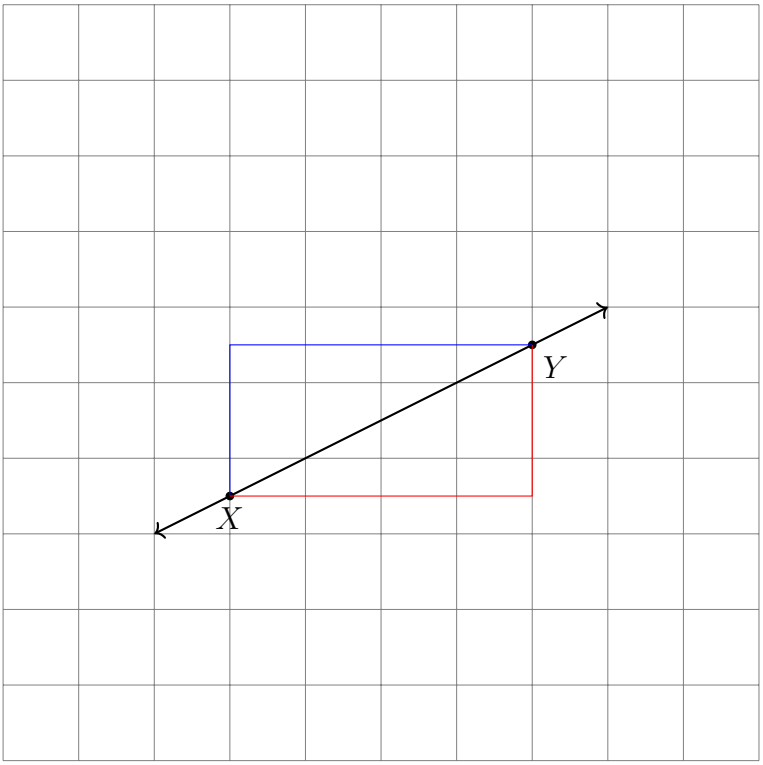


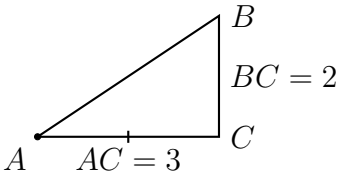


Drawing lines and shapes

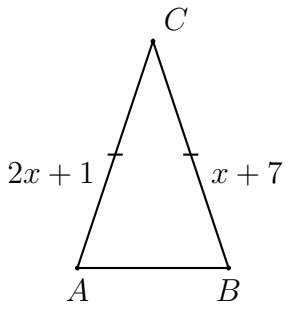
tikz draw command, node labeling function

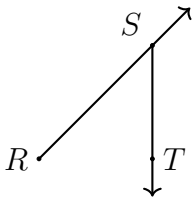






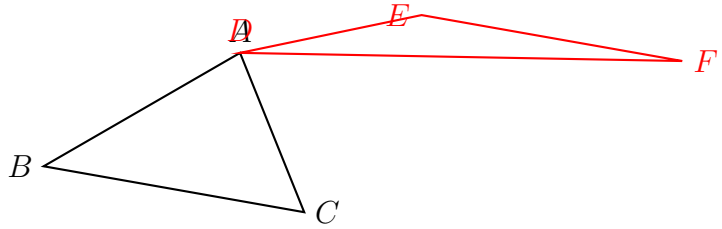
Given $\triangle ABC$ with $\overline{AC} \cong \overline{BC}$. $AC = x + 7$ and $BC = 2x + 1$. Find AC.



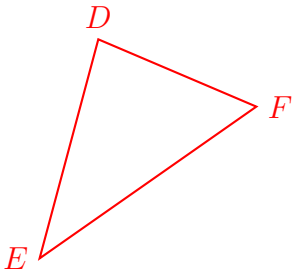


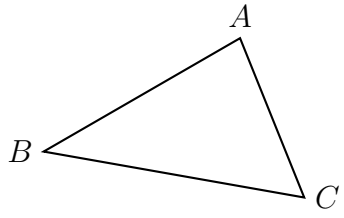
Triangles

Shift using coordinates

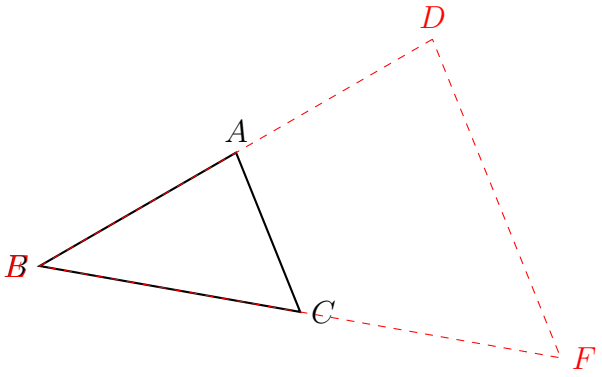


Shift and rotate

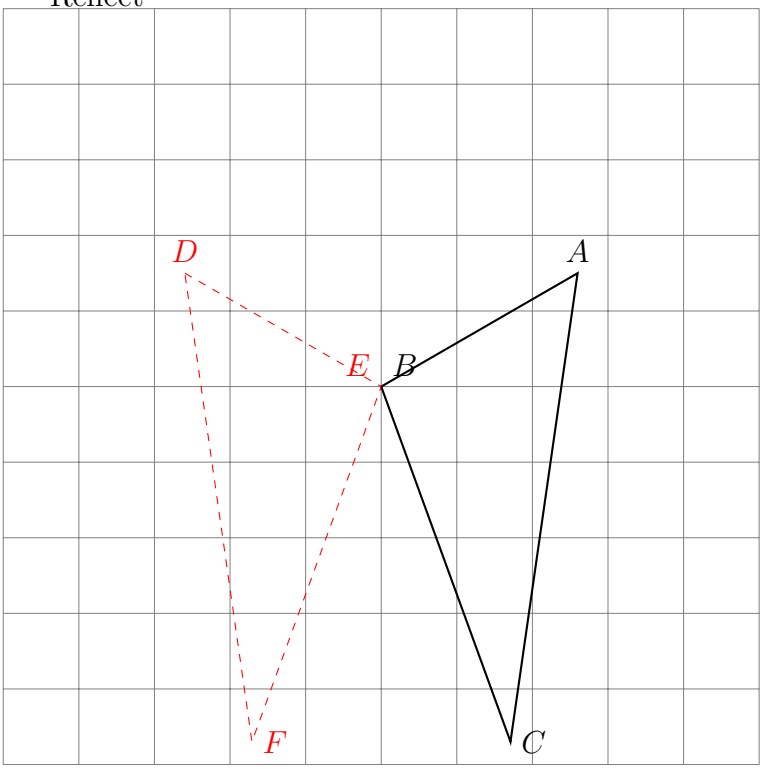




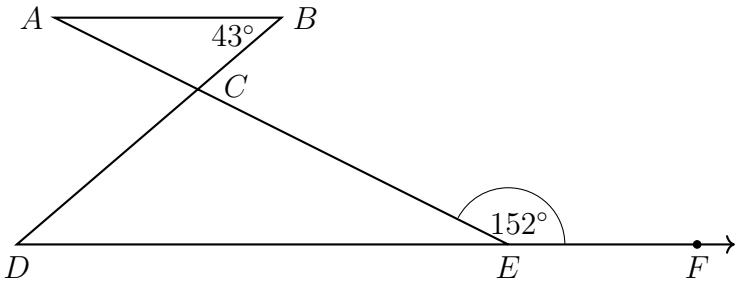
Scale

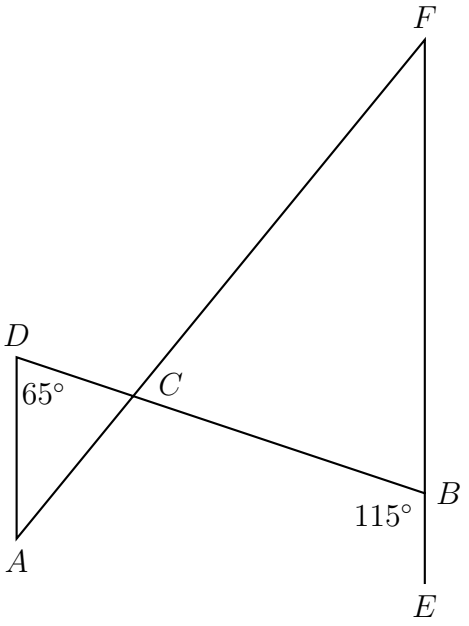


Reflect

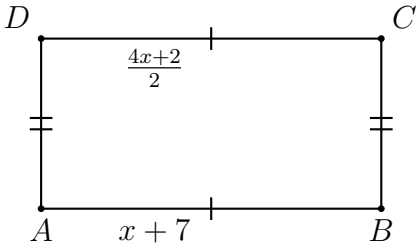


Complex Regents angle problems



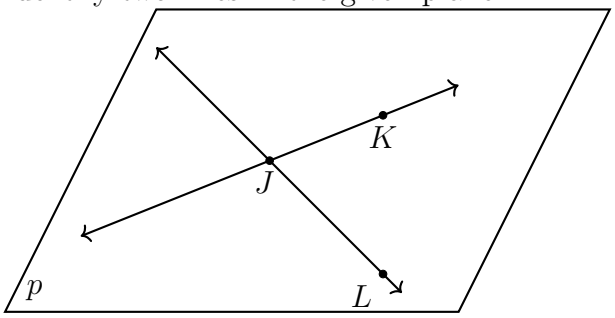


Given the rectangle $ABCD$ with $\overline{AB} \cong \overline{CD}$ and $\overline{BC} \cong \overline{DA}$. $AB = x + 7$ and $CD = \frac{4x+2}{2}$. Find AB.

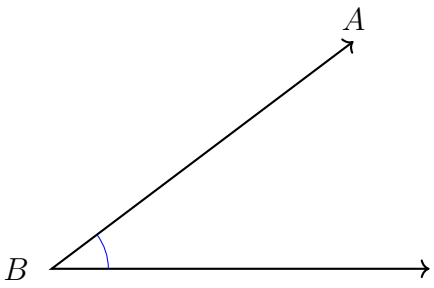


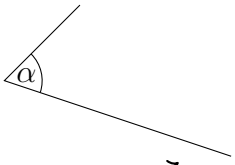
Plane geometry

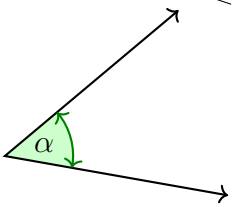
Identify two lines in the given plane.

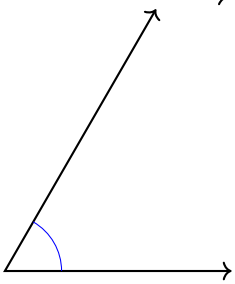


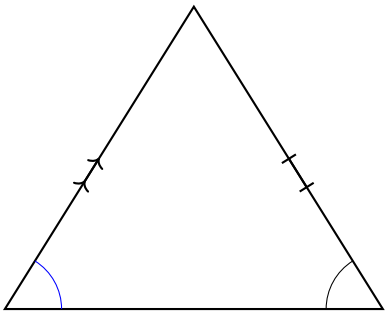
Marking angles

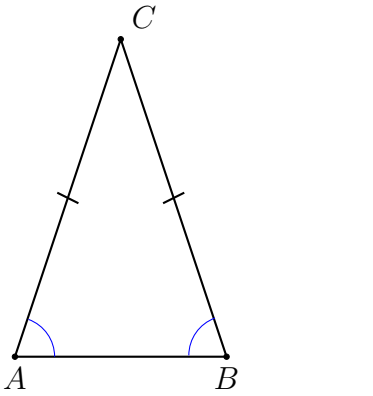


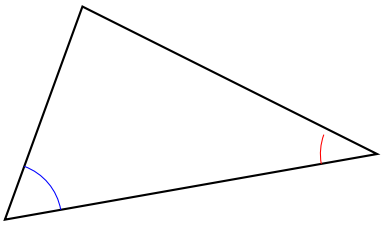


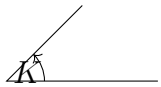


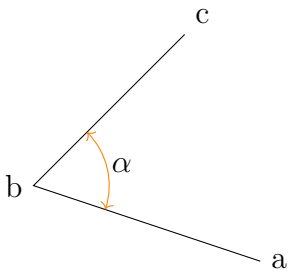





C
A
B




K


c
α
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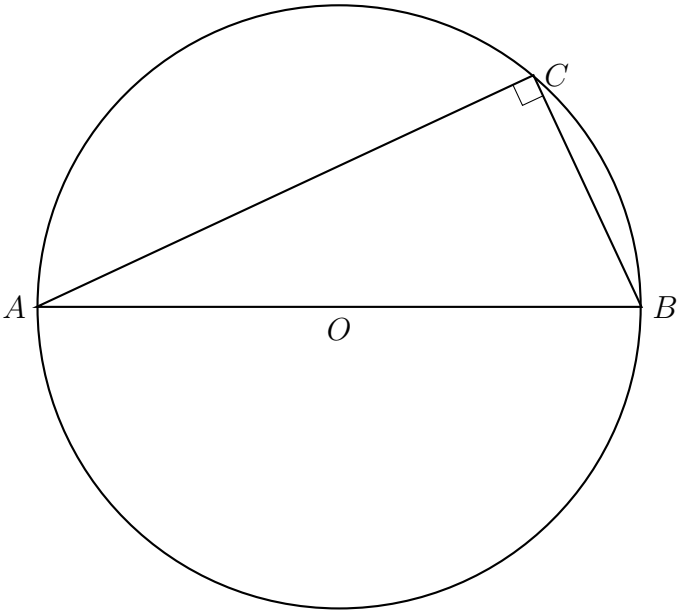
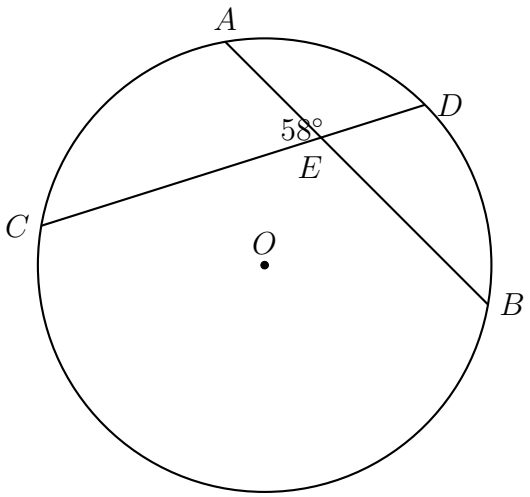
a

Circles