

Mathematics

# **Impossible triangles**

## **Independent Task**

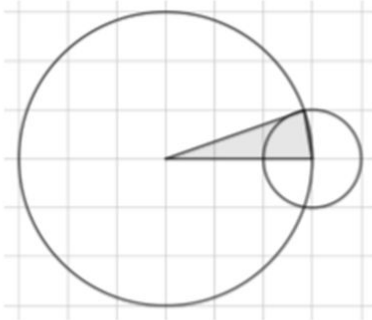
Miss Oreyomi



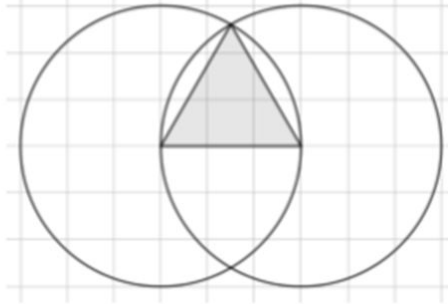
# Questions

1) What are the side lengths of each of the triangles on the **centimetre grid**? What do they have in common?

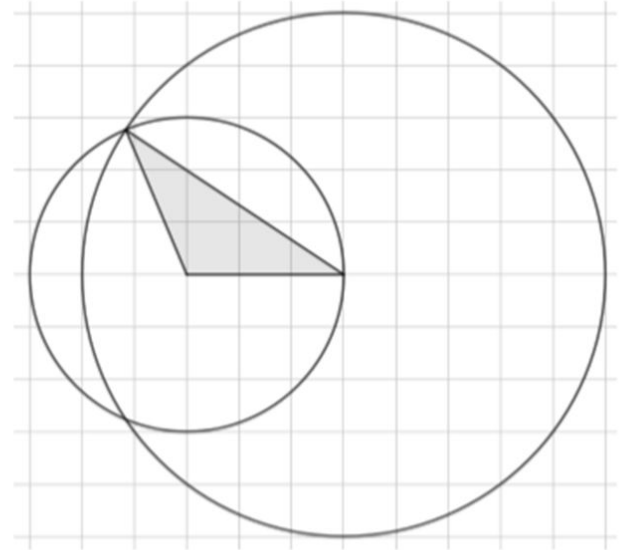
a)



b)



c)



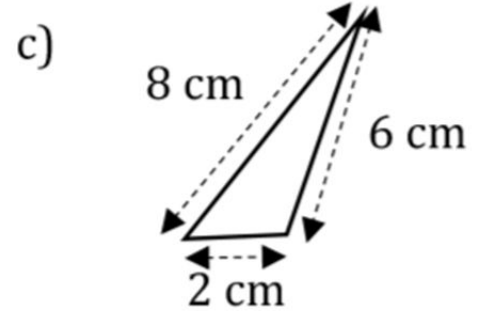
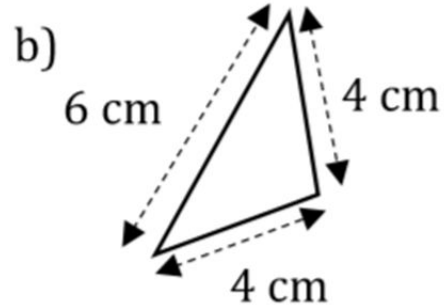
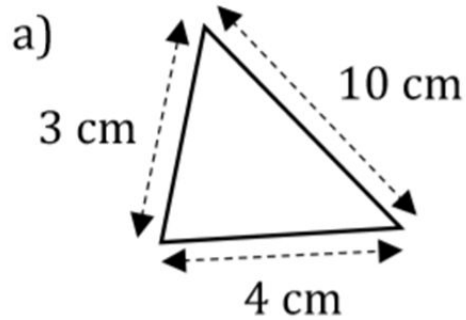
# Questions

2) Explain why an isosceles triangle with side lengths 3cm, 3cm and 6cm is impossible.



# Questions

3) Which of these triangles are possible?



[Not to scale]



# Questions

4) An isosceles triangle has side lengths  $a$  cm and  $b$  cm. What range of values can  $b$  take for the triangle to be possible?

