

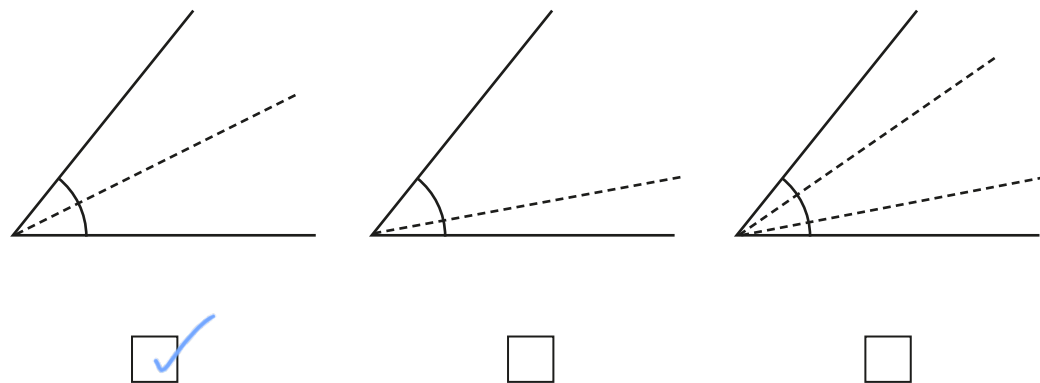
# Construct an angle bisector

H



- 1 What does *bisect* mean?  
Talk about it with a partner.

- 2 a) One of the diagrams shows an angle bisector.  
Tick the diagram that shows an angle bisector.



- b) Explain why the others are not angle bisectors.

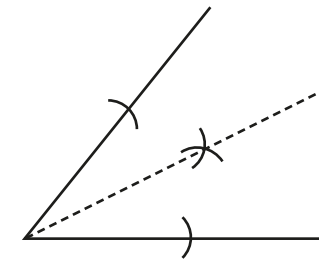
They do not cut the angles in half.

- c) Write a definition for an angle bisector.

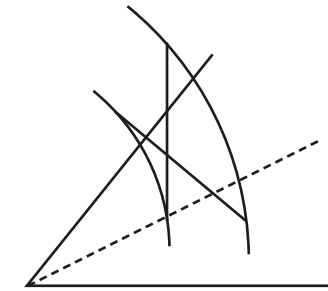
A line segment that cuts an angle exactly in half.

- 3 Here are two methods for bisecting an angle.

Method 1

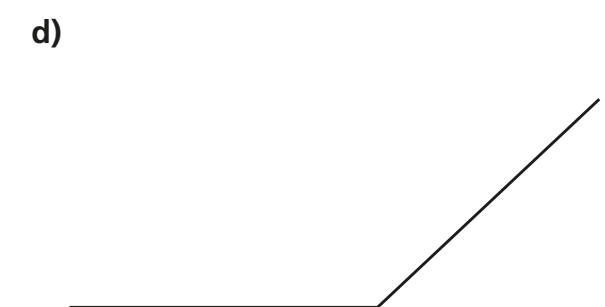
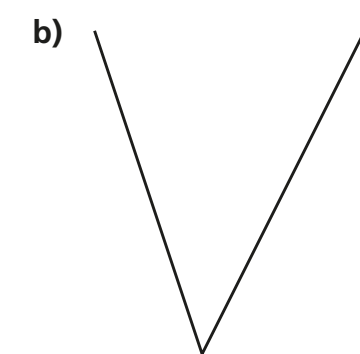
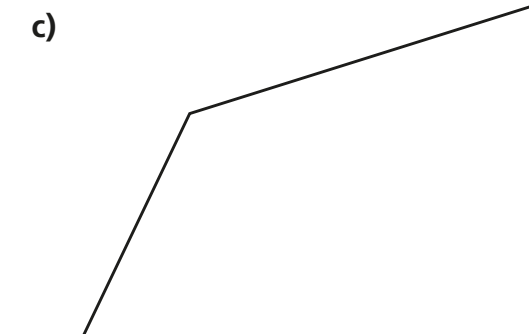
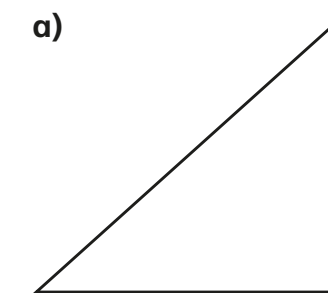


Method 2



Which method do you prefer? various  
Why?

- 4 Use a ruler and pair of compasses to construct the angle bisector of each angle.



5 Draw each angle and construct its angle bisector.

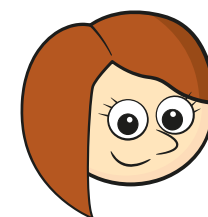
- a)  $60^\circ$       b)  $90^\circ$       c)  $140^\circ$       d)  $200^\circ$

Use a protractor to check each angle bisector.

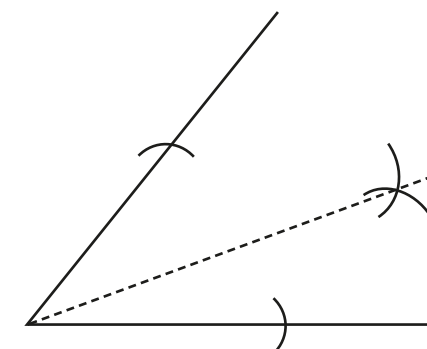
How do you know you are correct?



6



I have bisected this angle.



Is Rosie correct? No

Explain your answer.

7

Write a set of instructions to explain how to construct an angle bisector.

Students should write instructions in their own words