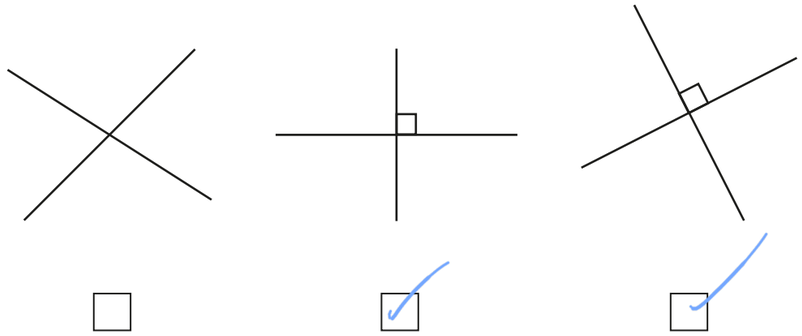
Construct a perpendicular bisector

H

1 Tick the perpendicular lines.



2 What is a perpendicular bisector of a line segment?

Talk about it with a partner.

3 Use a ruler and pair of compasses to bisect the line segment AB.

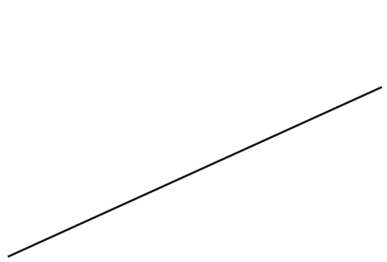
A ——————————— B

4 Construct the perpendicular bisector of each line.

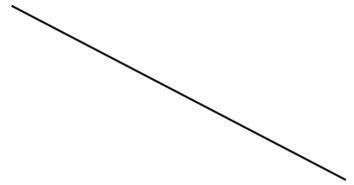
a)

b)

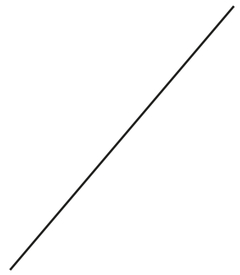
c)



d)

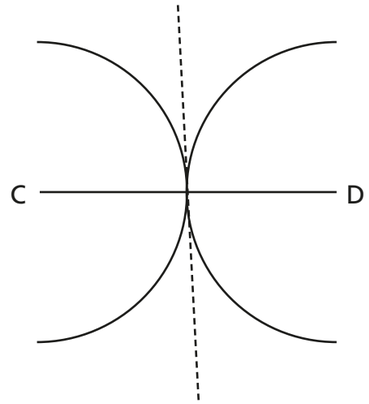


e)



f)

5 Filip is attempting to construct a perpendicular bisector of the line segment CD.



Explain what Filip has done wrong.

He didn't open his compass wide enough.

6 **a)** Draw a 6.4 cm line and label it XY.

b) Construct a perpendicular bisector of the line.

c) Label the point where the line segment XY is bisected, Z.

d) What is the length of the line segment XZ?

Did you need to measure it?

3·2 cm

7 **a)** Use a ruler and pair of compasses to construct an equilateral triangle with a side length of 5 cm.

b) Construct the perpendicular bisector of each side of the triangle.

c) Use the point at which the perpendicular bisectors meet as the centre, and draw the circle that passes through each vertex of the triangle.

8 Write a set of instructions explaining how to construct a perpendicular bisector.

Students should write instructions in their own words.