# Loci: choosing the construction

**1** From what? Tick one.

A lifeboat must stay exactly 50 m from the buoy B.




**Rule** exactly 50 m from the buoy B

**From** ☐ a point ☐ a line ☐ two points ☐ two lines

**Construction** _____

**2**

A post box is the same distance from the houses H and K.




**Rule** the same distance from H and K

**From** ☐ a point ☐ a line ☐ two points ☐ two lines

**Construction** _____

**3**

A rope goes round a straight bench PQ, exactly 1 m from it all the way round.



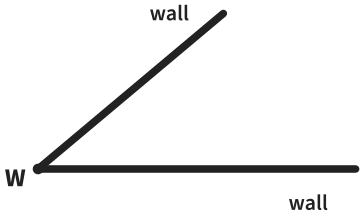

**Rule** _____

**From** ☐ a point ☐ a line ☐ two points ☐ two lines

**Construction** _____

**4**

A statue stands the same distance from the two straight walls that meet at the corner W.




**Rule** _____

**From** ☐ a point ☐ a line ☐ two points ☐ two lines

**Construction** _____

**5 Notice the change!**

A bench is less than 8 m from the tap T, and closer to the swings S than to the slide D. Name both constructions.

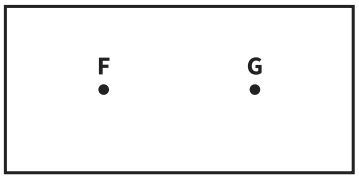



**Rule 1** _____

**Rule 2** _____

**6**

Fire station F covers every home closer to F than to fire station G.
Name the construction. Which side do you shade?

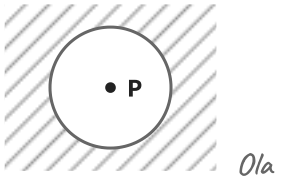



**Construction** _____

**Shade** _____

**7**

An alarm sounds if anyone is within 3 m of the painting P. Ola draws a circle round P and shades outside it. What has she done wrong?




**Answer** _____

**8**

The school bell B can be heard up to 9 m away. Scale: 1 cm represents 2 m.
Name the construction. What width do you set the compasses to?



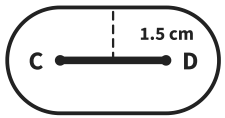

**Construction** _____

**Compasses** _____

# Loci: choosing the construction *further practice*

**9**

Write the rule this locus shows.




**Rule** _____

**10**

A boat sails a course that is equidistant from the two rocks M and N.
What does equidistant mean?
Which construction?




**Meaning** _____

**Construction** _____

**11**

A drone flies exactly 10 m from a long straight railway that goes on in both directions. What shape is its locus?




**Shape** _____

**12**

A camera must be more than 4 m from the door D. Scale: 1 cm represents 2 m.
Name the construction.
Where do you shade?

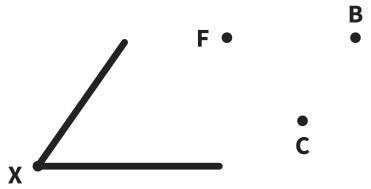



**Construction** _____

**Shade** _____

**13**

A food van must be within 5 m of the fountain F, closer to the car park C than to the bus stop B, and the same distance from two paths that meet at X.
Name the three constructions.



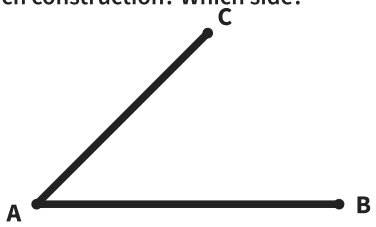

1 _____

2 _____

3 _____

**14**

Two straight hedges AB and AC meet at A.
Zara wants the points inside the angle that are closer to AB than to AC.
Which construction? Which side?




**Construction** _____

**Side** _____

**15**

Nobody may stand within 3 m of a straight conveyor belt PQ. Scale: 1 cm represents 2 m. Name the construction.
How far from PQ do you draw it?




**Construction** _____

**Distance** _____

**16**

Leo says “closer to A than to B” and “the same distance from A and B” need different constructions.
Is he right? Explain.

**Answer** _____