Perpendicular Bisectors - Worksheet

Skill
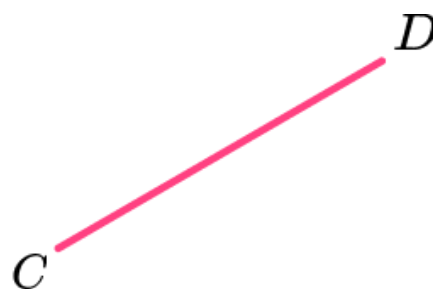
Group A - Perpendicular bisector of a line

Construct a perpendicular bisector for each of the line segments below:
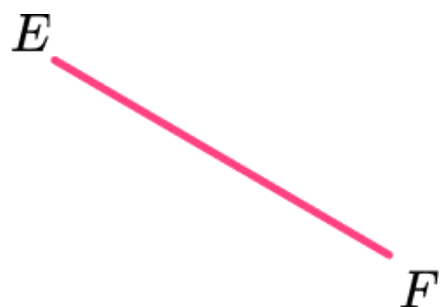
1)

A —————— B

2)

D

C

3)

E

F

4)

H

G

5)

I

J

6)

K

L

Perpendicular Bisectors - Worksheet

Group B - Drawing lines and perpendicular bisectors

Draw the following size lines and construct a perpendicular bisector for each of the lines:

1) 10cm

2) 12cm

3) 140mm

4) 130mm

5) 10.5cm

6) 108mm

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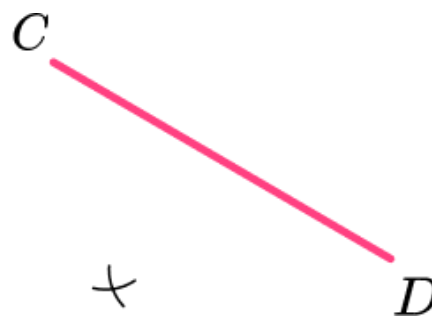
2

Perpendicular Bisectors - Worksheet

Group C - Constructions from a point to a line

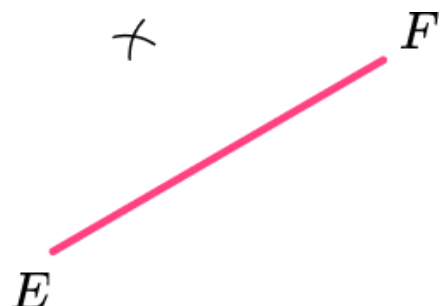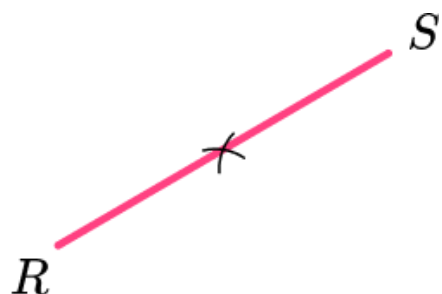Construct a perpendicular bisector from the point to the line segment.

1)

$\times$

$A \rule{3cm}{0.4pt} B$

2)

C

$\times$

D

3)

$\times$

F

E

4)

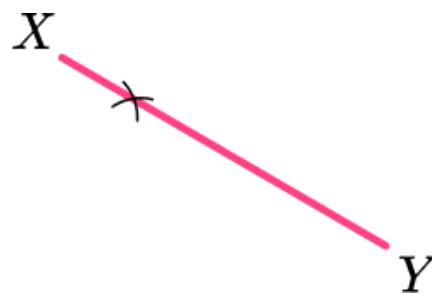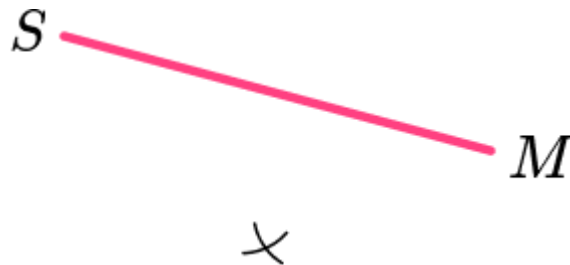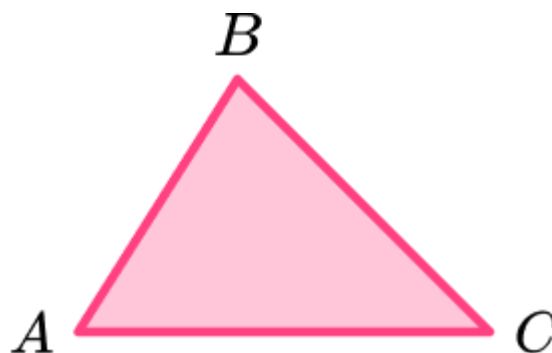$P \rule{1cm}{0.4pt} \times \rule{1cm}{0.4pt} Q$

5)

S

R

6)

X

Y

Perpendicular Bisectors - Worksheet

Applied

1) Using a ruler and compass construct a perpendicular from the point to line segment SM.
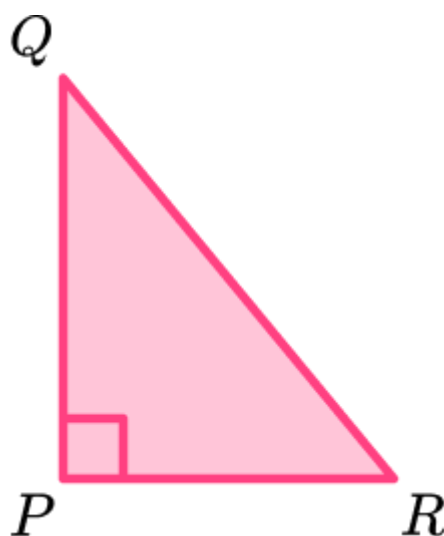
S •———————

———————• M

$\times$

2) Using a ruler and compass construct a perpendicular bisector for each of the sides of triangle ABC. Clearly label the point where the bisectors intersect.
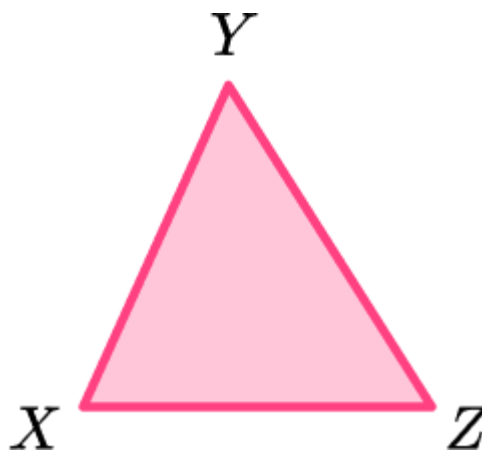
B

A C

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Perpendicular Bisectors - Worksheet

3)   Using a ruler and compass construct a perpendicular bisector for each of the
sides of triangle PQR. Clearly label the point where the bisectors intersect.

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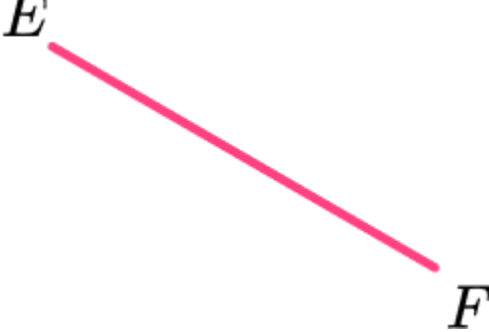## Perpendicular Bisectors - Exam Questions

1) Using a ruler and compass construct a perpendicular bisector for line segment XY.

Y

X

....

(2 marks)

---

2) Using a ruler and compass construct a perpendicular bisector for each of the sides of triangle XYZ. Clearly label the point where the bisectors intersect.

Y

X Z

....

(4 marks)

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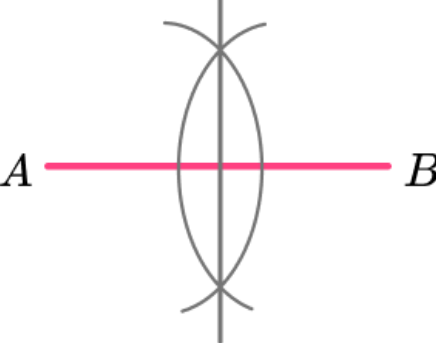
6

Perpendicular Bisectors - Exam Questions

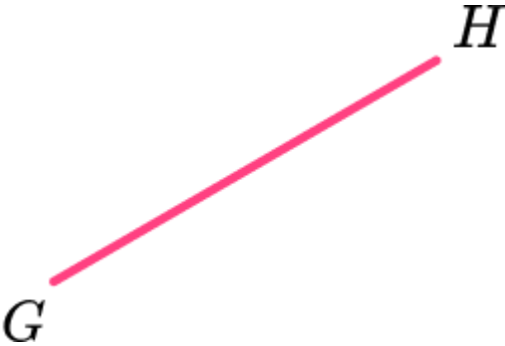**3)** Using a ruler and compass construct a perpendicular from the point to line segment AB.
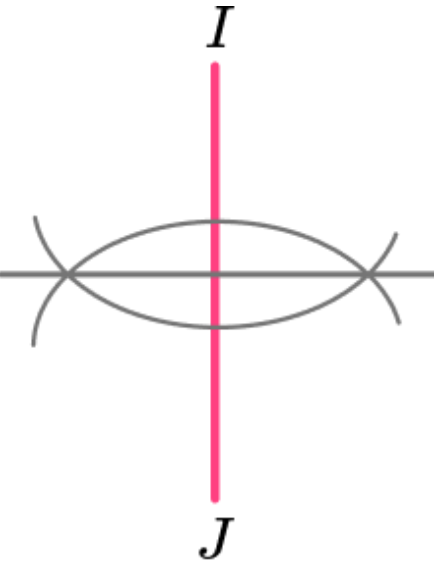
A ———————————— B

....

(3 marks)

Perpendicular Bisectors - Answers
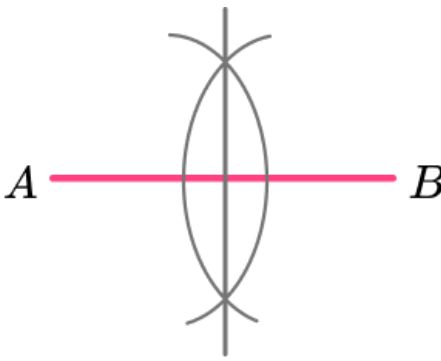
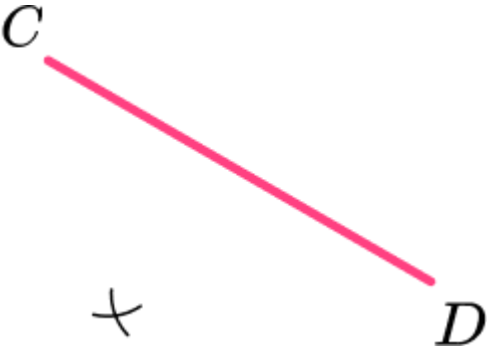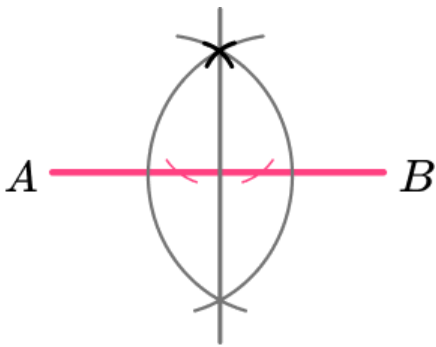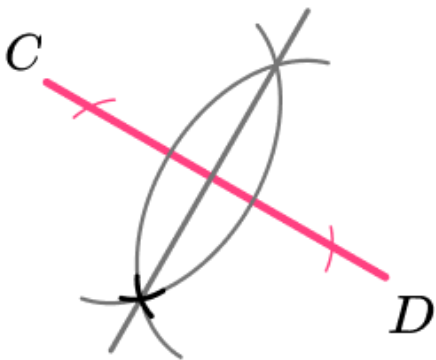|	Question	Answer
	Skill Questions	
Group A	Construct a perpendicular bisector for each of the line segments below: 1) 2) 3) 	1) 2) 3)

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8
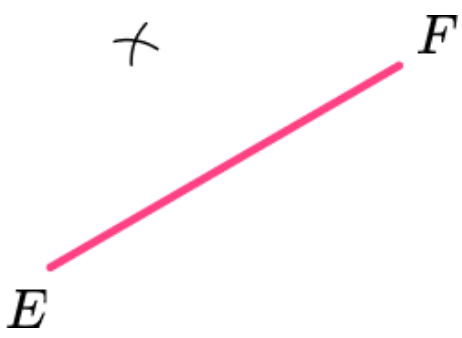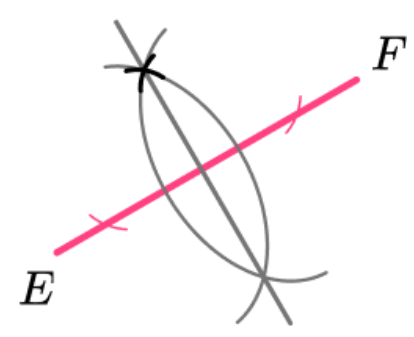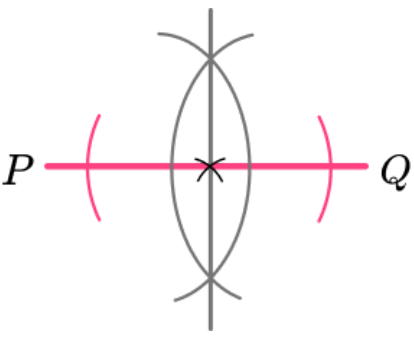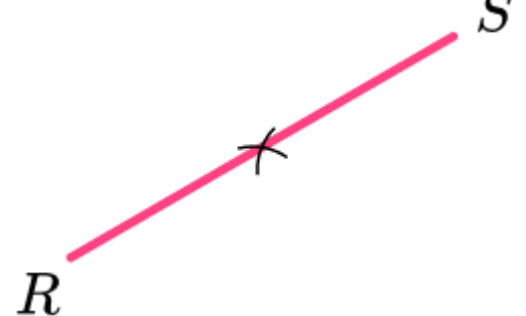
Perpendicular Bisectors - Answers

Group A	4)	4)
	H *G*	*H* *G*
	5) *I* *J*	5) *I* *J*
	6) *K* *L*	6) *K* *L*
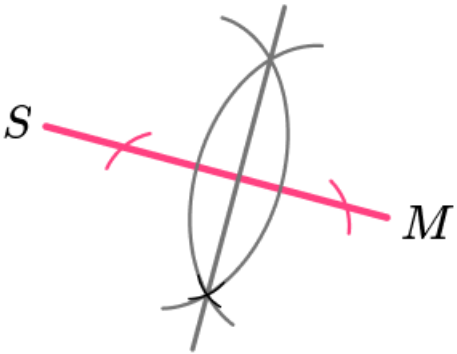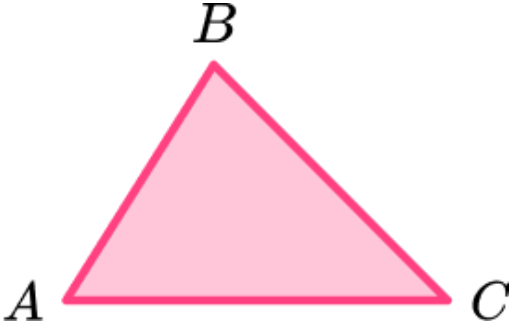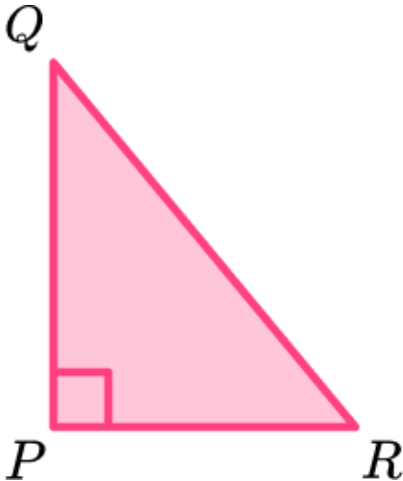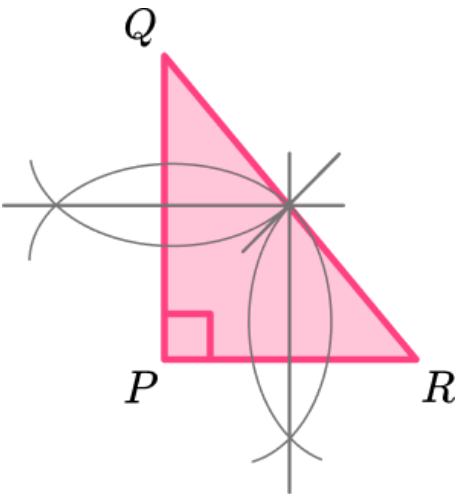
Perpendicular Bisectors - Answers

Group B	Draw the following size lines and construct a perpendicular bisector for each of the lines. **1)** 10cm **2)** 12cm **3)** 140mm **4)** 130mm **5)** 10.5cm **6)** 108mm	Check the length of the line while marking and ensure the construction lines are clearly shown along with the bisector. Should look like the image below: A —————— B
Group C	Construct a perpendicular bisector from the point to the line segment. **1)** × A ———————— B **2)** C D +	**1)** A ——✕—— B **2)** C D

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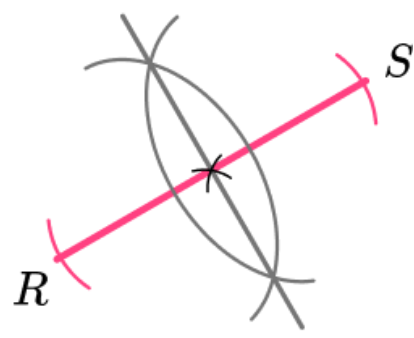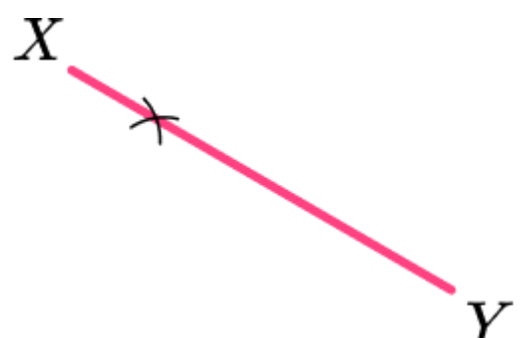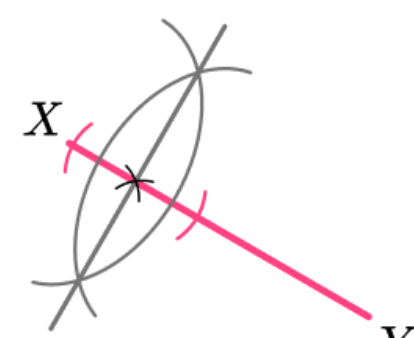
10

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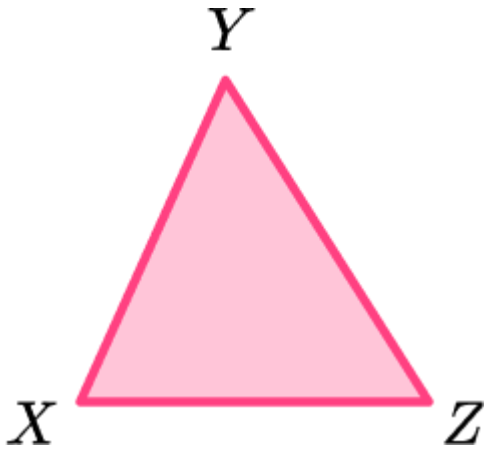
Perpendicular Bisectors - Answers

Group C	3)	3)
	4)	4)
	5)	5)
	6)	6)

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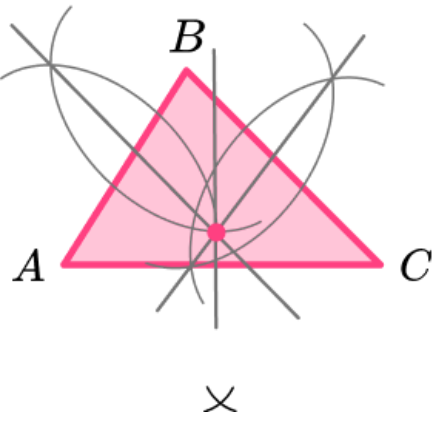LEARNING

Perpendicular Bisectors - Answers

	Question	Answer
	Applied Questions	
1)	Using a ruler and compass construct a perpendicular from the point to line segment SM.	
2)	Using a ruler and compass construct a perpendicular bisector for each of the sides of triangle ABC. Clearly label the point where the bisectors intersect.	
3)	Using a ruler and compass construct a perpendicular bisector for each of the sides of triangle PQR. Clearly label the point where the bisectors intersect.	

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12

Perpendicular Bisectors - Mark Scheme

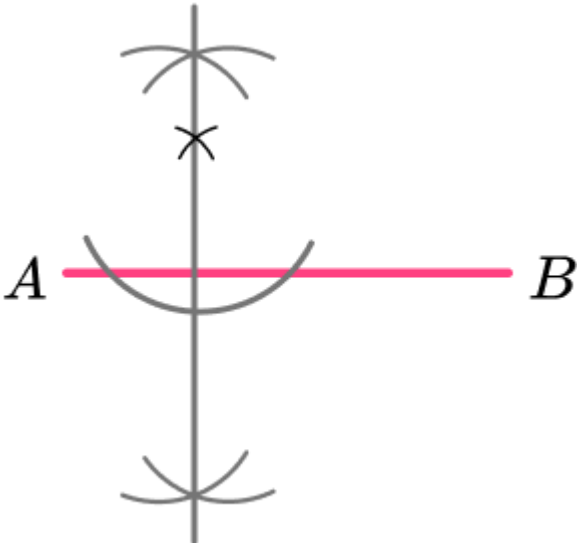|	Question	Answer	
	Exam Questions		
1)	Using a ruler and compass construct a perpendicular bisector for line segment XY.	for all construction arcs shown **(1)** for perpendicular bisector drawn through XY **(1)**	**(2)**
2)	Using a ruler and compass construct a perpendicular bisector for each of the sides of triangle XYZ. Clearly label the point where the bisectors intersect.	for perpendicular bisector of XZ with construction lines **(1)** for perpendicular bisector of XY with construction lines **(1)** for perpendicular bisector of YZ with construction lines **(1)** for a clear point of intersection **(1)**	**(4)**

Perpendicular Bisectors - Mark Scheme

3)	Using a ruler and compass construct a perpendicular from the point to line segment AB.		(3)

for arcs drawn from original point **(1)**
for construction arcs for bisector **(1)**
for perpendicular bisector drawn through AB passing through the given point **(1)**

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14