



JP Maths

Revision



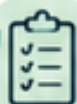
Attempt the paper
before watching the
solutions!

[https://www.youtube.com/
@JPMathsRevision](https://www.youtube.com/@JPMathsRevision)



HIGHER TIER

Midpoints and Distance



INSTRUCTIONS

- Use **black ink** or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided – *there may be more space than you need.*
- You must **show all your working.**
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- If your calculator does not have a π button, take the value of π to be 3.142 unless the question instructs otherwise.



INFORMATION

- The marks for **each** question are shown in brackets– *use this as a guide as to how much time to spend on each question.*



ADVICE

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.



You've got this!

1. Find the midpoint of the line segment joining A(2, 6) with B(8, 10)

.....
(Total for Question 1 is 1 mark)

2. Find the midpoint of the line segment joining P(-5, 7) with Q(3, -1)

.....
(Total for Question 2 is 1 mark)

3. Find the midpoint of the line segment joining A(-8, 4) with B(6, -10)

.....
(Total for Question 3 is 1 mark)

4. Find the midpoint of the line segment joining R(-1, -3) with S(-5, -8)

.....
(Total for Question 4 is 1 mark)

5. Point M is the midpoint of the line joining $A(3, -2)$ and $B(x, 8)$

The coordinates of M are $(7, 3)$.

Find the value of x .

.....
(Total for Question 5 is 2 marks)

6. Point P has coordinates $(-4, 9)$.

The midpoint of PQ is $(3, 2)$.

Find the coordinates of the point Q.

.....
(Total for Question 5 is 2 marks)

7. The midpoint of the line joining $(-7, a)$ and $(5, 11)$ is $(-1, 6)$.

Find the value of a .

.....
(Total for Question 7 is 2 marks)

8. Find the distance of the line segment joining A(3, 5) with B(9, 13)

.....
(Total for Question 8 is 2 marks)

9. Find the distance of the line segment joining P(-4, 7) with Q(-3, -2).

Give your answer to 1 decimal place.

.....
(Total for Question 2 is 1 mark)

10. Find the distance of the line segment joining A(2, 3) with B(8, 12).

Give your answer to 1 decimal place.

.....
(Total for Question 3 is 1 mark)

11. Find the distance of the line segment joining R(-5, -1) with S(7, -6).

.....
(Total for Question 4 is 1 mark)
