



JP Maths

Revision



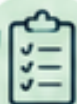
Attempt the paper
before watching the
solutions!

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



HIGHER TIER

Expanding Triple Brackets



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. Expand and simplify $(x + 1)(x + 2)(x + 3)$

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

2. Expand and simplify $(2x - 1)(x + 2)(x - 5)$

.....
(Total for Question 2 is 3 marks)

3. Expand and simplify $(3x - 1)(2x + 1)(x - 4)$

.....
(Total for Question 3 is 3 marks)

4. Expand and simplify $(4x - 1)(x - 3)(2x - 5)$

.....
(Total for Question 4 is 3 marks)

5. Expand and simplify $(x - 1)(x + 1)^2$

.....
(Total for Question 5 is 3 marks)

6. Show that $(x - 2)^3$ can be written in the form $ax^3 + bx^2 + cx + d$ where a , b , c and d are integers.

.....
(Total for Question 6 is 3 marks)
