JP Maths Revision

Attempt the paper before watching the solutions!

https://www.youtube.com/@JPMathsRevision

FOUNDATION / HIGHER TIER

Changing the Subject

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. Make x the subject:

$x + 7 = y$

.....

(Total for Question 1 is 1 mark)

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2. Make a the subject:

$b = a - 4$

.....

(Total for Question 2 is 1 mark)

---

3. Make m the subject:

$n = 3m$

.....

(Total for Question 3 is 1 mark)

---

4. Make p the subject:

$q = \frac{p}{5}$

.....

(Total for Question 4 is 1 mark)

---

5. Make x the subject:

$y = x + 12$

.....

(Total for Question 5 is 1 mark)

---

6. Make x the subject:

$y = 2x + 5$

.....

(Total for Question 6 is 2 marks)

---

7. Make a the subject:

$b = 4a - 7$

.....

(Total for Question 7 is 2 marks)

---

8. Make m the subject:

$n = \frac{m}{3} + 8$

.....

(Total for Question 8 is 2 marks)

---

9. Make p the subject:

$q = 6 - 2p$

.....

(Total for Question 9 is 2 marks)

---

10. Make x the subject:

$y = \dfrac{x + 4}{3}$

.....

(Total for Question 10 is 2 marks)

---

11. Make x the subject:

$y = \dfrac{x}{4} - 3$

.....

(Total for Question 11 is 2 marks)

---

12. Make a the subject:

$b = \dfrac{a + 7}{5}$

.....

(Total for Question 12 is 2 marks)

---

13. Make m the subject:

$$n = \frac{2m - 3}{6}$$

.....

(Total for Question 13 is 2 marks)

---

14. Make x the subject:

$$y = \frac{5 - x}{2}$$

.....

(Total for Question 14 is 2 marks)

---

15. Make p the subject:

$$q = \frac{3p + 1}{4}$$

.....

(Total for Question 15 is 2 marks)

---

16. Make x the subject:

$$y = x + a$$

.....

(Total for Question 16 is 2 marks)

---

17. Make x the subject:

$y = 3x + b$

.....

(Total for Question 17 is 2 marks)

---

18. Make x the subject:

$y = ax + 4$

.....

(Total for Question 18 is 2 marks)

---

19. Make x the subject:

$y = 5x - c$

.....

(Total for Question 19 is 2 marks)

---

20. Make x the subject:

$y = \dfrac{x + a}{3}$

.....

(Total for Question 20 is 2 marks)

---

21. Make x the subject:

$y = a\,x + b$

.....

(Total for Question 21 is 2 marks)

---

22. Make x the subject:

$$y = \frac{x + b}{a}$$

.....

(Total for Question 22 is 2 marks)

---

23. Make x the subject:

$$y = \frac{a}{x}$$

.....

(Total for Question 23 is 2 marks)

---

24. Make x the subject:

$$y = \frac{a\,x + b}{c}$$

.....

(Total for Question 24 is 3 marks)

---

25. Make r the subject:

$A = \pi r^2$

.....

(Total for Question 25 is 2 marks)

---

26. Make h the subject:

$V = \pi r^2 h$

.....

(Total for Question 26 is 3 marks)

---

27. Make x the subject:

$y = \sqrt{x + 5}$

.....

(Total for Question 27 is 2 marks)

---

28. Make r the subject:

$V = \frac{4}{3}\pi r^3$

.....

(Total for Question 28 is 3 marks)

---

29. Make a the subject:

$$v = ut + \frac{1}{2}at^2$$

.....

(Total for Question 29 is 3 marks)

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30. Make m the subject:

$$E = mc^2$$

.....

(Total for Question 30 is 2 marks)
