



# JP Maths

## Revision



Attempt the paper  
before watching the  
solutions!

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



FOUNDATION / HIGHER TIER

## Forming and Solving Equations



### 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  $\pi$  button, take the value of  $\pi$  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. Mia is 4 years older than Ben.

Noah is twice as old as Ben

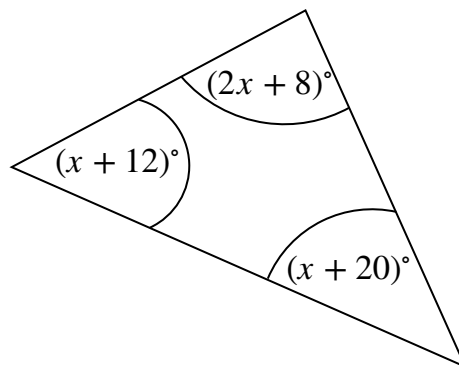
The total of their ages is 40.

How old is Mia?

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

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2. Below is a triangle.

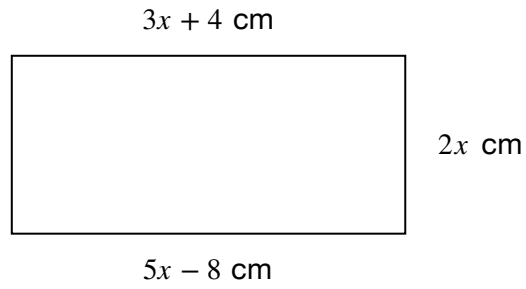


Find the size of the largest angle.

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

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3. Below is a rectangle.



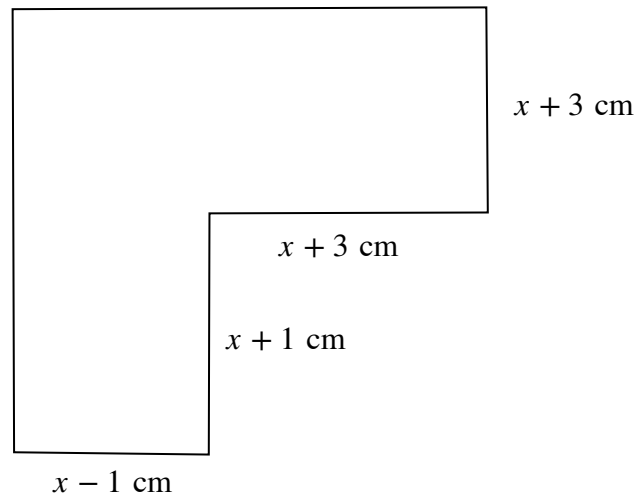
Work out the area.

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

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4. The perimeter of the below shape is 52 cm.

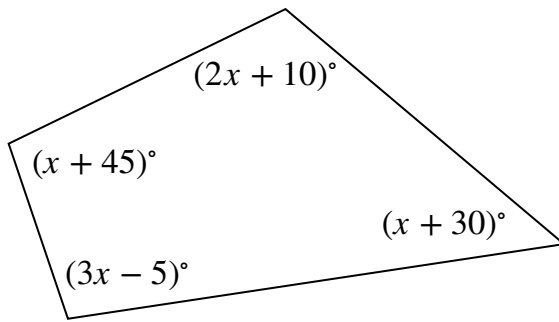
Work out the value of  $x$ .



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

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5. Below is a quadrilateral.



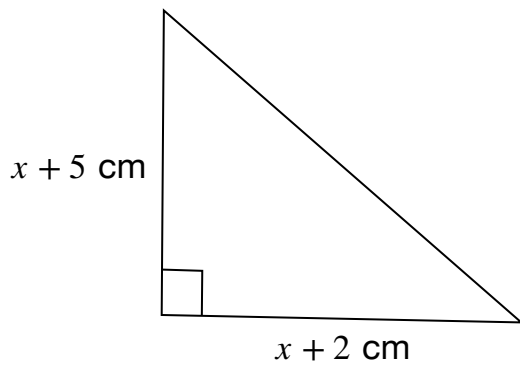
Work out the size of the smallest angle.

.....  
(Total for Question 5 is 4 marks)

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6. The area of the below triangle is  $42 \text{ cm}^2$ .

Work out the value of  $x$ .



.....  
(Total for Question 6 is 4 marks)

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7. Three consecutive integers add up to 72.

Form and solve an equation to find the numbers.

.....  
**(Total for Question 7 is 4 marks)**

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8. A taxi company charges a £3 fixed fee plus £2 per mile.

A journey costs £19.

Form and solve an equation to find how many miles were travelled.

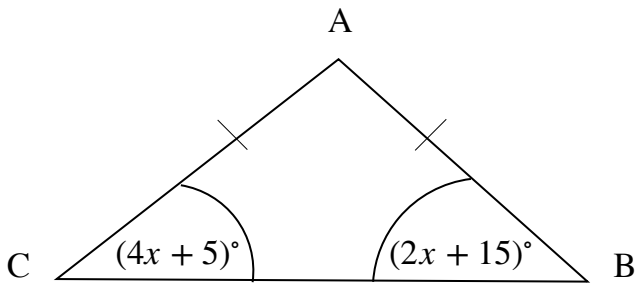
.....  
**(Total for Question 8 is 3 marks)**

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9. ABC is an isosceles triangle.

$$AC = AB$$

Find the size of angle CAB



.....  
(Total for Question 9 is 4 marks)

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10. Sam buys 4 notebooks costing  $\pounds x$  each and a calculator costing  $\pounds 12$ .

He spends  $\pounds 36$  altogether.

Form and solve an equation to find the cost of one notebook.

.....  
(Total for Question 10 is 3 marks)

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**11.** A balance scale is level.

One side has 3 identical boxes and a 5 kg bag.

The other side has 2 identical boxes and an 11 kg bag.

Each box weighs  $x$  kg.

Find the value of  $x$ .

.....  
**(Total for Question 7 is 4 marks)**

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**12.** A polygon has 8 sides.

Each interior angle is  $15^\circ$  bigger than the previous one.

Find the size of the largest angle.

.....  
**(Total for Question 8 is 5 marks)**

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