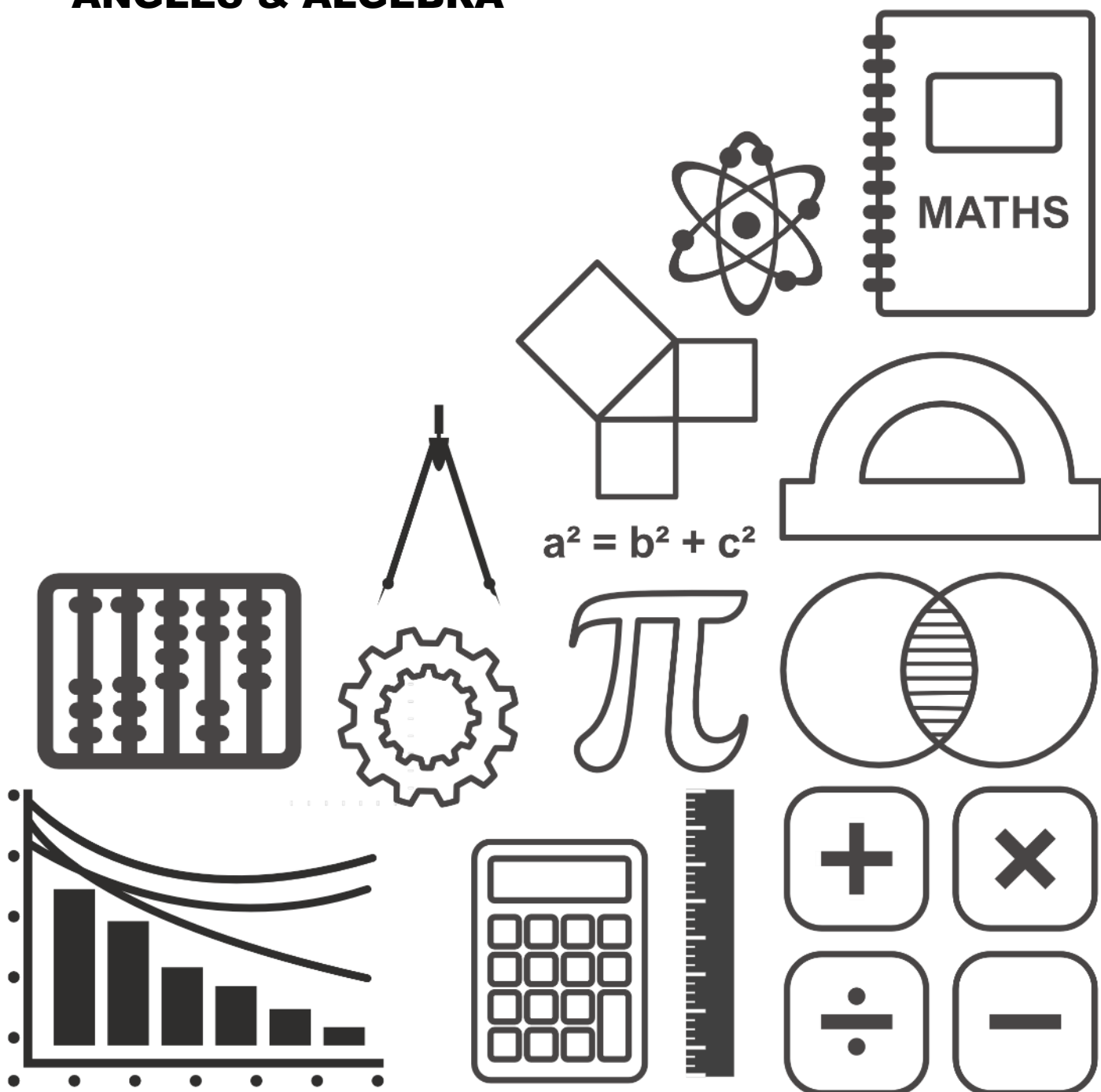


MATHSDIY

GCSE TOPIC BOOKLET ANGLES & ALGEBRA



1. Find the size of the angle marked z .

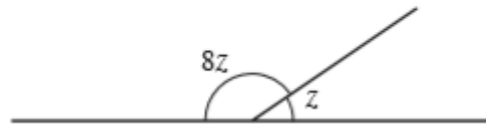


Diagram not drawn to scale.

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.....

$z = \dots\dots\dots^\circ$ [2]

- 2.

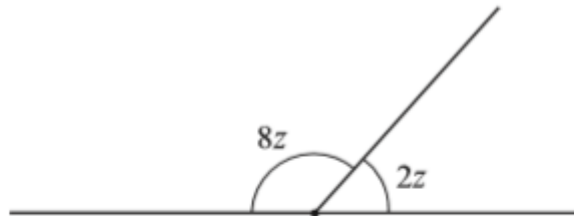


Diagram not drawn to scale.

Find the value of z .

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$z = \dots\dots\dots^\circ$ [2]

3. The angles of a quadrilateral are x° , 49° , $3x^\circ$ and 111° .
Form an equation in x , and use your equation to find the value of x .

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[4]

4.

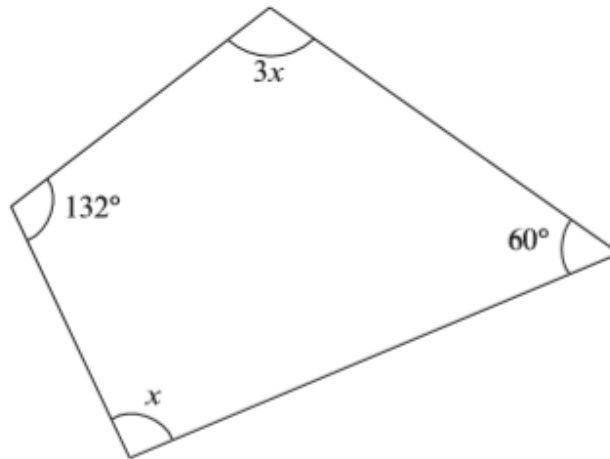


Diagram not drawn to scale

Calculate the value of x .

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$x =$

[4]

5. The diagram shows a triangle with angles, measured in degrees, of $5x$, $2x$ and $3x$.

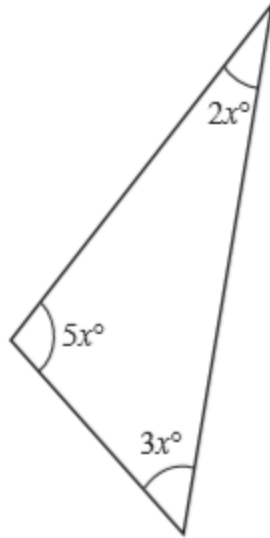


Diagram not drawn to scale.

Form an equation in x and solve it.

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[3]

6. The diagram shows a quadrilateral with angles, measured in degrees, of $5x + 40$, $2x + 20$, $2x$ and $3x$.

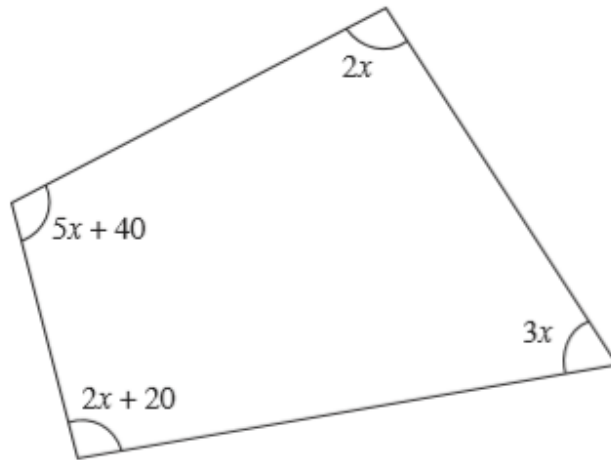


Diagram not drawn to scale.

Form an equation in x and solve it.

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[3]

7. The diagram shows four angles, measured in degrees, meeting at a point O .

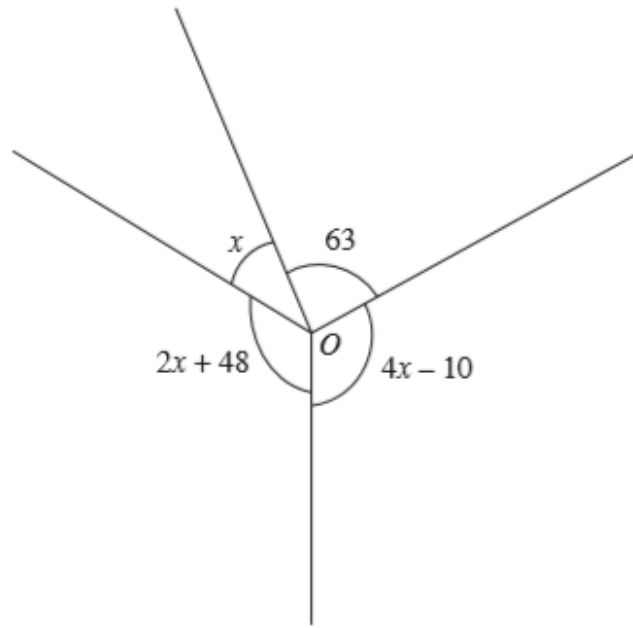


Diagram not drawn to scale.

(a) Write down an equation that x satisfies.

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[2]

(b) Solve your equation to find the value of x .

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[2]

$x = \dots\dots\dots^\circ$

8.

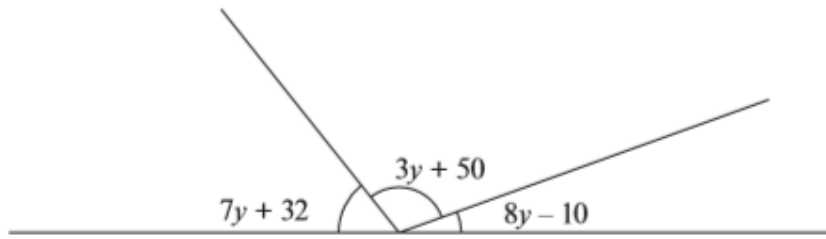


Diagram not drawn to scale

All of the angles are measured in degrees.

Find the size of each of the three angles.

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$7y + 32 = \dots\dots\dots^\circ$ $3y + 50 = \dots\dots\dots^\circ$ $8y - 10 = \dots\dots\dots^\circ$

[5]

9.

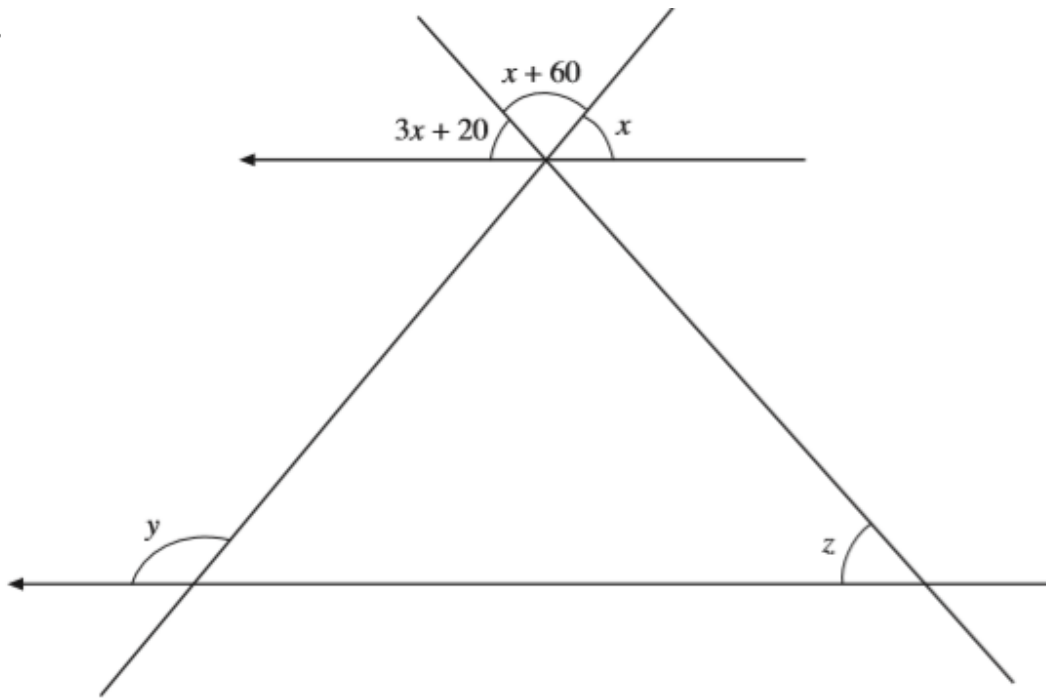


Diagram not drawn to scale.

All angles are measured in degrees.
Find the size of angles x , y and z .

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$x =$, $y =$, $z =$

[5]