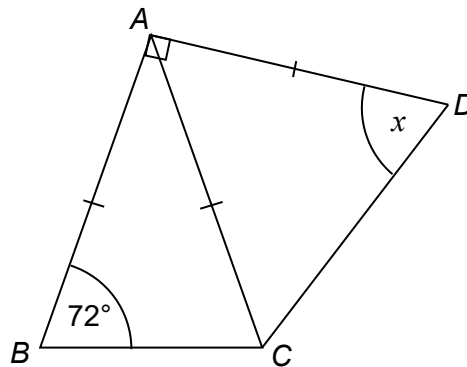


# Topic Test 1 (20 minutes)

## Angles - Higher

- 1  $AB = AC = AD$   
Angle  $BAD = 90^\circ$



Not drawn accurately

Work out the size of angle  $x$ .

You **must** show your working which may be on the diagram.

[4 marks]

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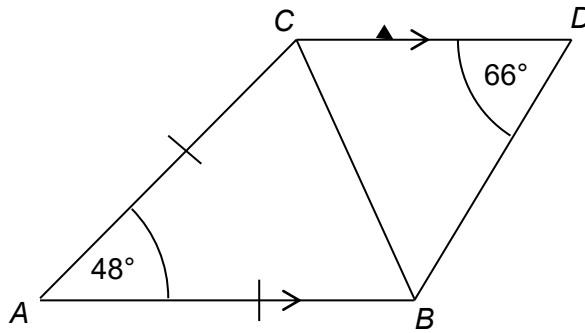
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Answer \_\_\_\_\_ degrees

- 2  $AB = AC$   
 $AB$  is parallel to  $CD$ .



Not drawn accurately

Prove that triangle  $BCD$  is isosceles.

[3 marks]

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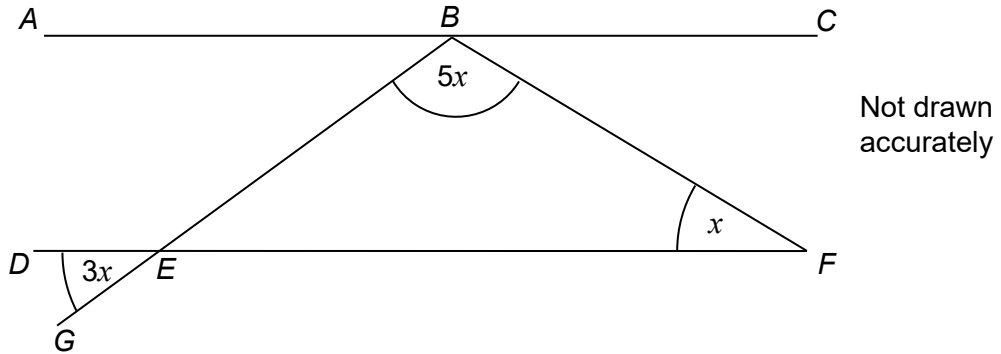
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3



In the diagram

angle  $EBF$  is five times the size of angle  $EFB$

angle  $DEG$  is three times the size of angle  $EFB$ .

3 (a) Work out the size of angle  $x$ .

[3 marks]

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Answer \_\_\_\_\_ degrees

3 (b) Angle  $ABE =$  angle  $CBF$

Are the lines  $AC$  and  $DF$  parallel?

Give a reason for your answer.

[2 marks]

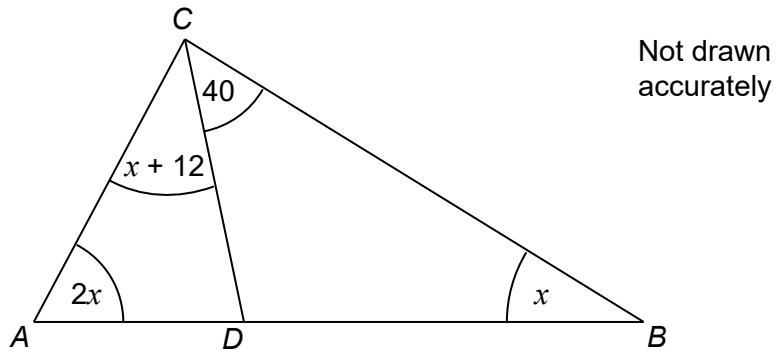
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4 All angles are in degrees.



Work out the size of angle  $CDB$ .

[4 marks]

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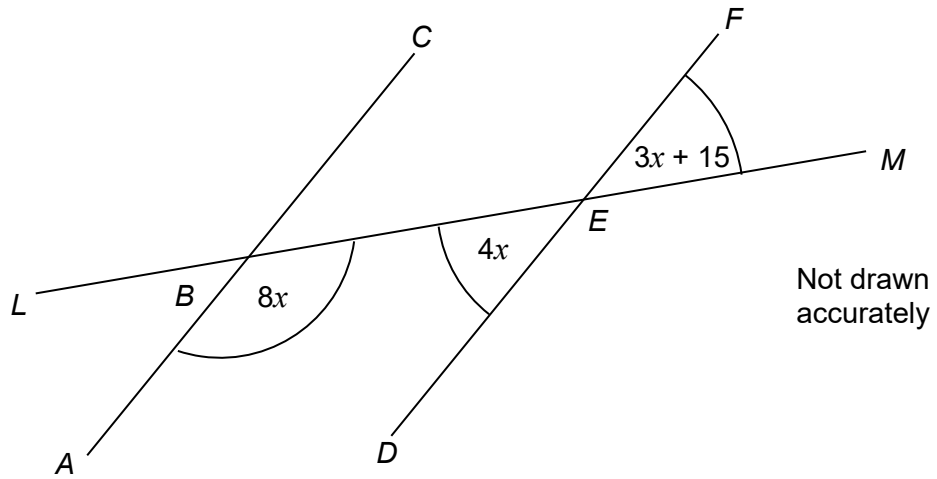
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Answer \_\_\_\_\_ degrees

- 5 The diagram shows three straight lines.  
All angles are in degrees.



Prove that  $AC$  is parallel to  $DF$ .

[4 marks]

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