Edexcel GCSE
Mathematics (Linear) – 1MA0
ANGLES: PARALLEL LINES

Materials required for examination
Ruler graduated in centimetres and millimetres, protractor, compasses, pen, HB pencil, eraser.
Tracing paper may be used.

Items included with question papers
Nil

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.
Calculators may be used.

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.
Questions labelled with an **asterisk** (*) are ones where the quality of your written communication will be assessed – you should take particular care on these questions with your spelling, punctuation and grammar, as well as the clarity of expression.

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.

1.

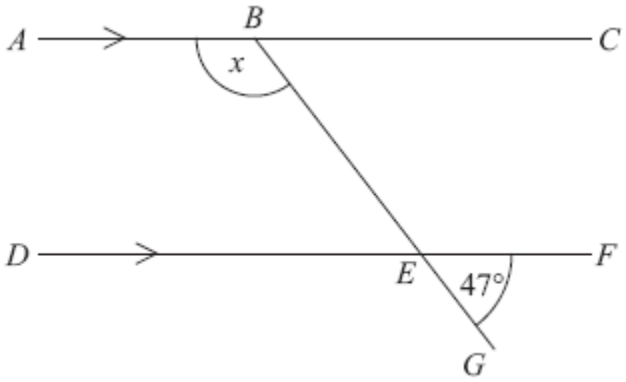


Diagram **NOT** accurately drawn

ABC and *DEF* are parallel lines.
BEG is a straight line.
Angle *GEF* = 47°.

Work out the size of the angle marked *x*.

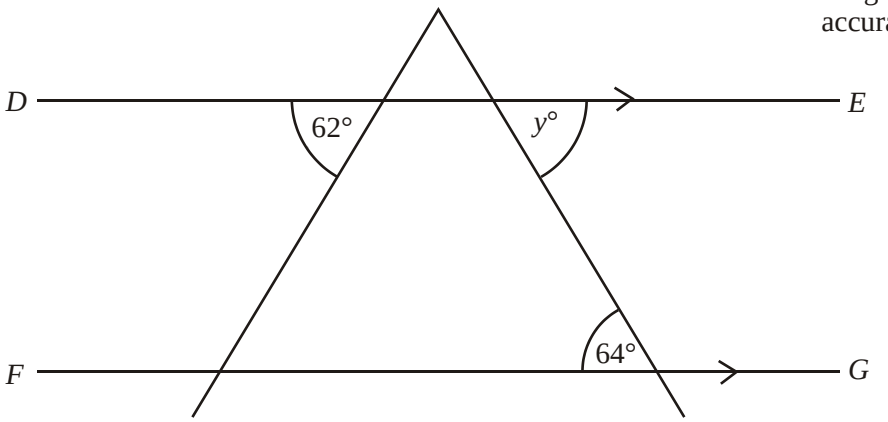
Give reasons for your answer.

.....°

(3 marks)

2.

Diagram **NOT** accurately drawn



DE is parallel to *FG*.

(i) Find the size of the angle marked $y°$.

.....°

(1)

(ii) **Give a reason for your answer.**

.....

.....

(2)

(3 marks)

3.

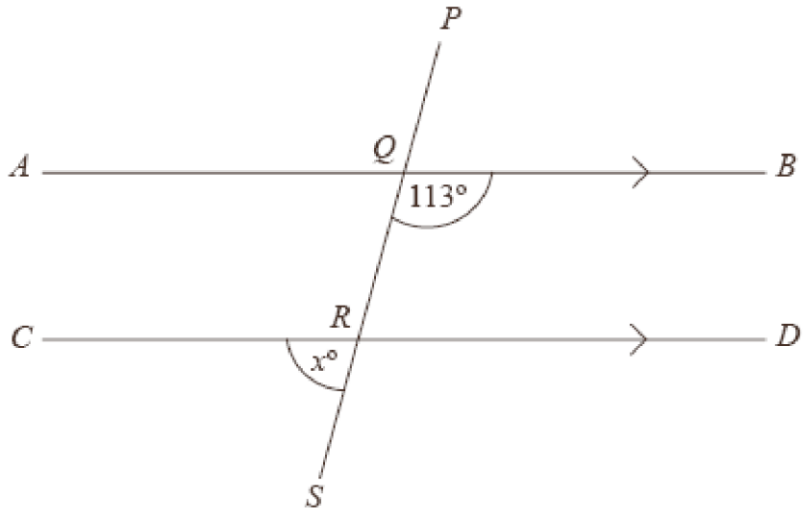


Diagram **NOT** accurately drawn

AQB, *CRD* and *PQRS* are straight lines.

AB is parallel to *CD*.

Angle *BQR* = 113º.

(a) Work out the value of *x*.

x = ...

(b) Give reasons for your answer.

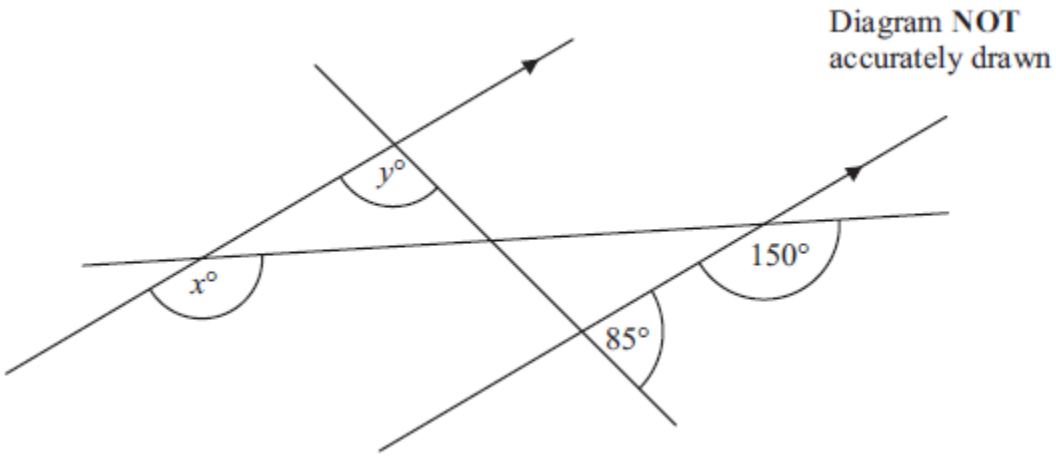
.....

.....

.....

(4 marks)

4.



(a) i) Find the value of x.

.....

(1)

ii) Give reasons for your answer.

.....

(1)

(b) i) Find the value of y.

.....

(2)

ii) Give reasons for your answer.

.....

(2)

(6 marks)

***5.**

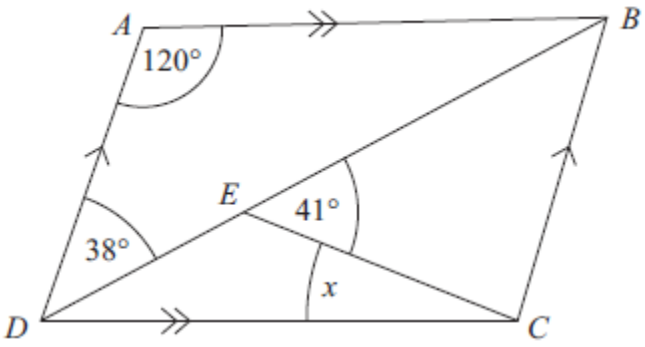


Diagram **NOT** accurately drawn

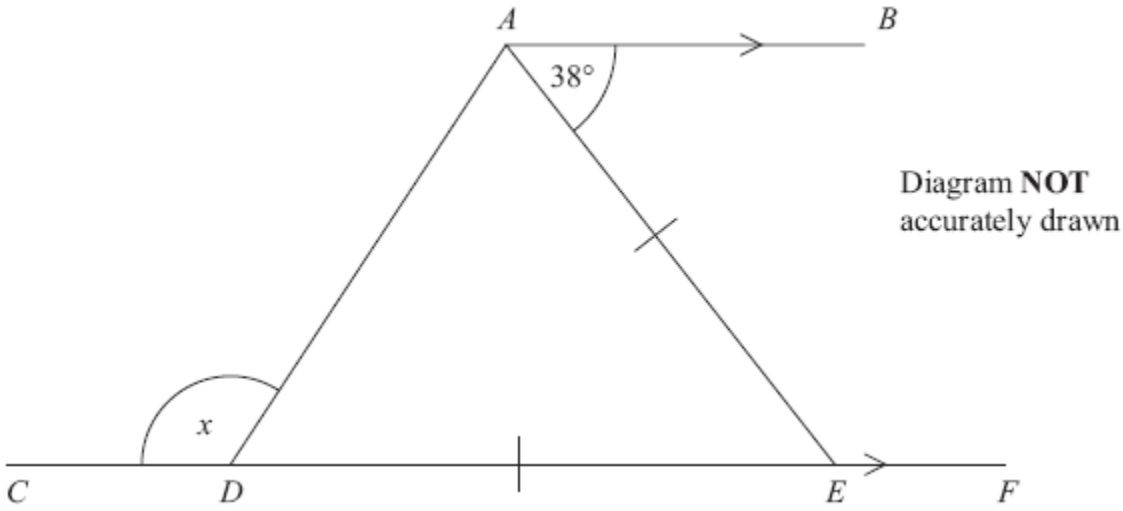
ABCD is a parallelogram.

Angle *ADB* = 38°.
Angle *BEC* = 41°.
Angle *DAB* = 120°.

Calculate the size of angle *x*.
You must give reasons for your answer.

(4 marks)

***6.**



CDEF is a straight line.
AB is parallel to *CF*.
DE = AE.

Work out the size of the angle marked *x*.
You must give reasons for your answer.

(4 marks)

***7.**

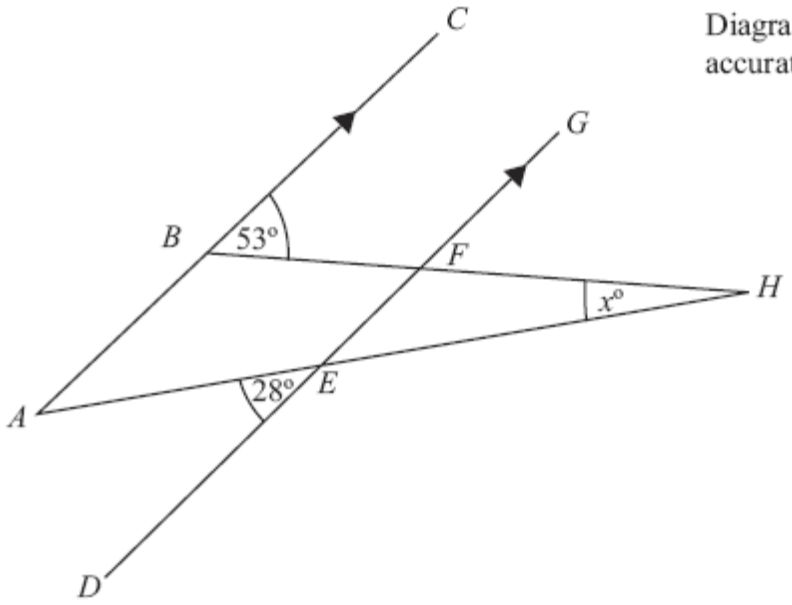


Diagram **NOT** accurately drawn

ABC and *DEFG* are parallel.
AEH and *BFH* are straight lines.
Work out the size of the angle marked *x*°.

.....°

(3 marks)