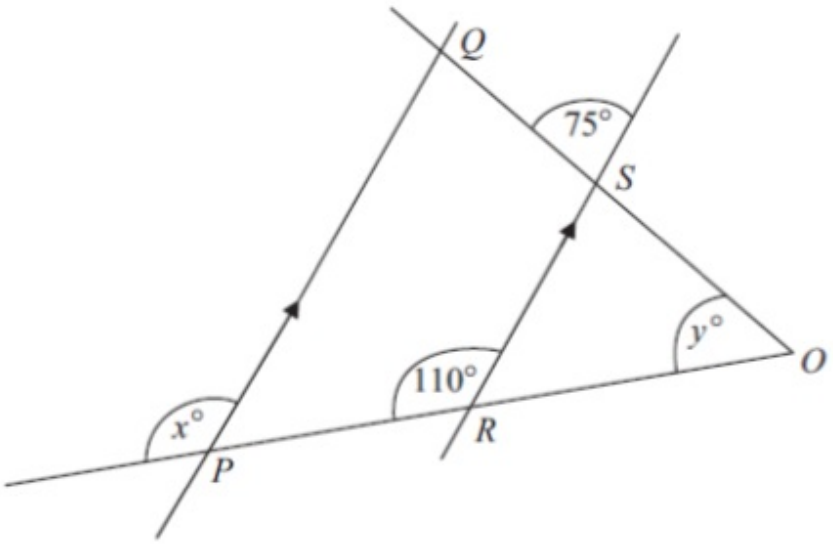
Question 7

Diagram **NOT** accurately drawn



PQ is parallel to *RS*.

OSQ and *ORP* are straight lines.

(a) (i) Write down the value of x.

$x =$ .....

(ii) Give a reason for your answer.

.....

(2)

(b) Work out the value of y.

$y =$ .....

(2)

(Total 4 marks)

Leave blank

3.

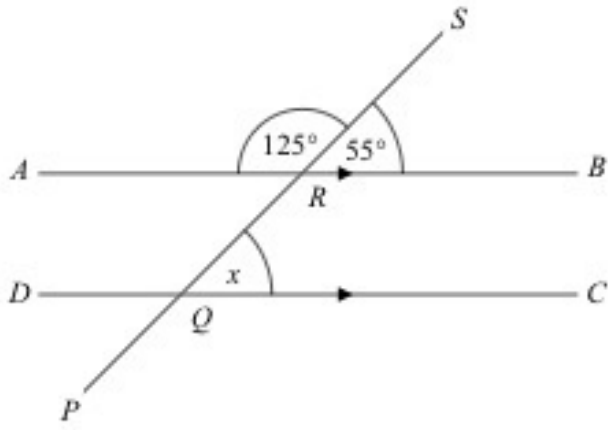


Diagram **NOT** accurately drawn

ARB is parallel to *DQC*.

PQRS is a straight line.

Angle *SRB* = 55°.

(i) Find the size of the angle marked *x*.

.....°

(ii) Give a reason for your answer.

.....

.....

(Total 2 marks)

Q3

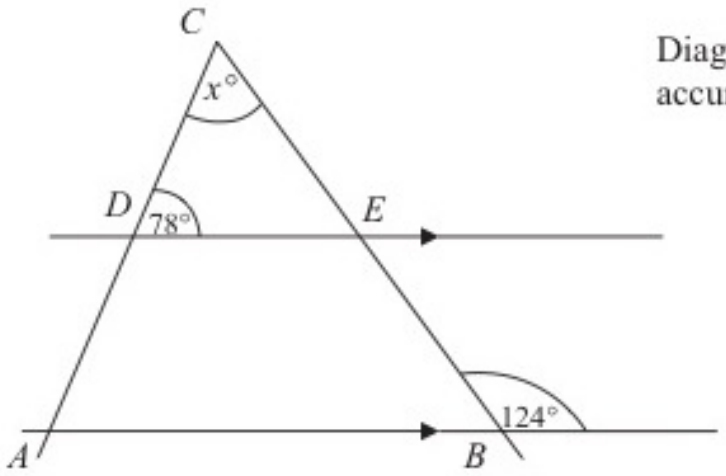


Diagram **NOT** accurately drawn

ABC is a triangle.
DE is a straight line parallel to *AB*.

Work out the value of *x*.

.....

(2)

Give reasons for your answer.

.....

.....

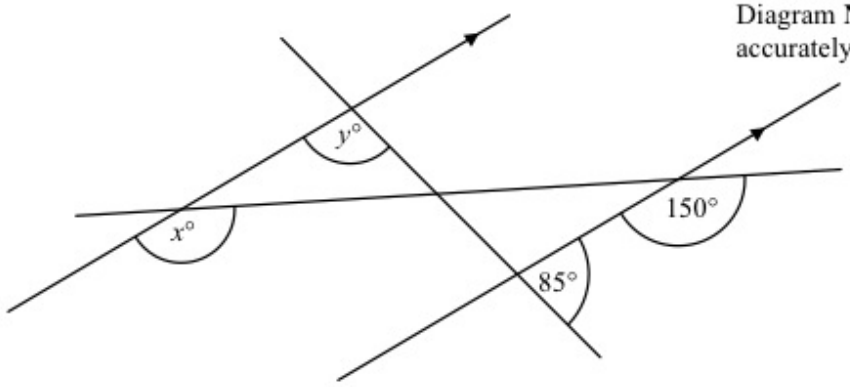
(1)

Q4

(Total 3 marks)

Leave blank

4.



(a) Find the value of x.

.....

(1)

(b) Find the value of y.
Give reasons for your answer.

.....

(2) **Q4**

(Total 3 marks)

Leave blank

3.

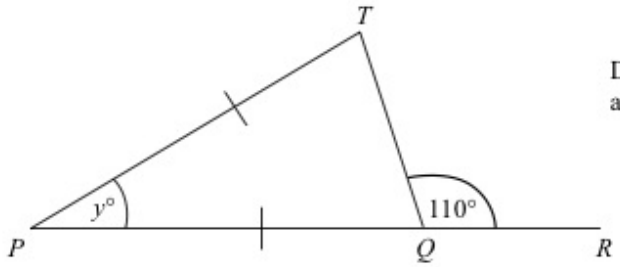


Diagram **NOT** accurately drawn

PQR is a straight line.
PT = *PQ*.

(i) Work out the value of *y*.

.....

(ii) Give reasons for your answer.

.....

.....

.....

Q3

(Total 4 marks)

***6**

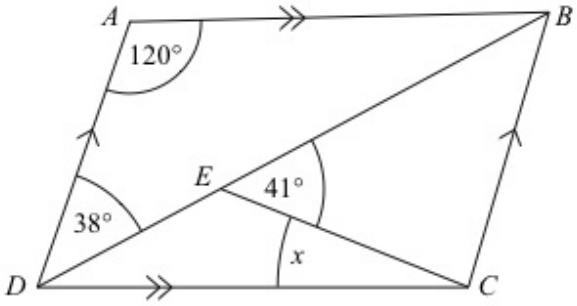


Diagram **NOT** accurately drawn

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.

(Total for Question 6 is 4 marks)

Leave blank

5.

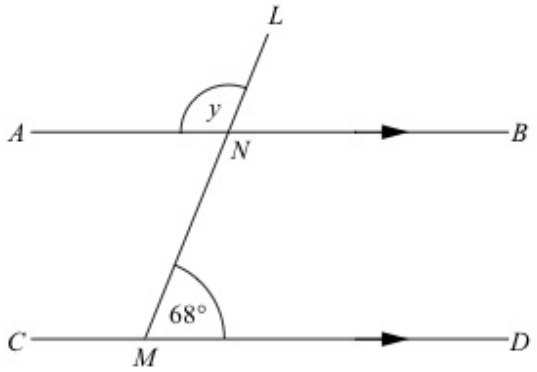


Diagram **NOT** accurately drawn

ANB is parallel to *CMD*.
LNM is a straight line.
Angle *LMD* = 68°

(i) Work out the size of the angle marked *y*.

..... °

(ii) Give reasons for your answer.

.....

.....

Q5

(Total 3 marks)

6. (a) Use your calculator to work out $\frac{2}{1.5+2.45}$

Write down all the figures on your calculator display.
You must give your answer as a decimal.

***10**

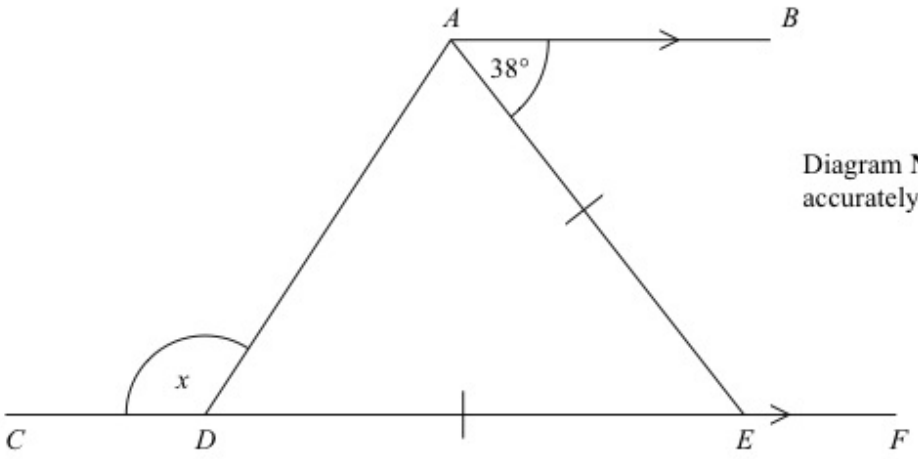


Diagram **NOT** accurately drawn

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

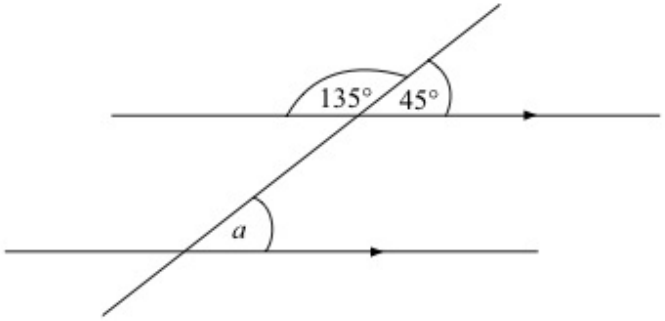
Work out the size of the angle marked *x*.
You must give reasons for your answer.

(Total for Question 10 is 4 marks)

Leave blank

6.

Diagram **NOT** accurately drawn



(i) Write down the size of the angle marked *a*.

..... °

(ii) Give a reason for your answer.

.....

Q6

(Total 2 marks)

7. A circle has a radius of 5 cm.

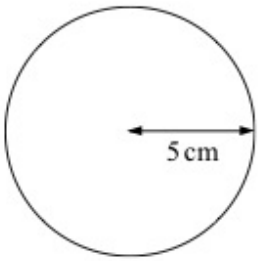


Diagram **NOT** accurately drawn

Work out the area of the circle.
Give your answer correct to 3 significant figures.

..... cm^2

Q7

(Total 2 marks)

Write your answers in the spaces provided.

You must write down all stages in your working.

1

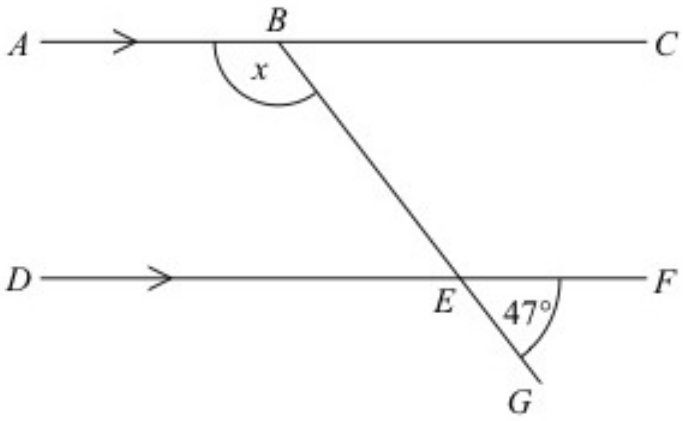


Diagram **NOT** accurately drawn

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.

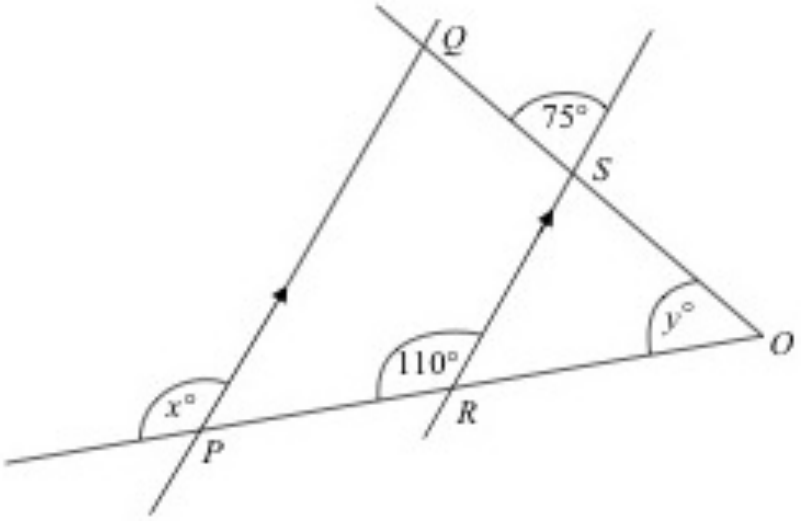
.....°

(Total for Question 1 is 3 marks)

Leave blank

7.

Diagram **NOT** accurately drawn



PQ is parallel to *RS*.

OSQ and *ORP* are straight lines.

(a) (i) Write down the value of x.

$x =$ .....

(ii) Give a reason for your answer.

.....

(2)

(b) Work out the value of y.

$y =$ .....

(2)

Q7

(Total 4 marks)

Leave blank

4.

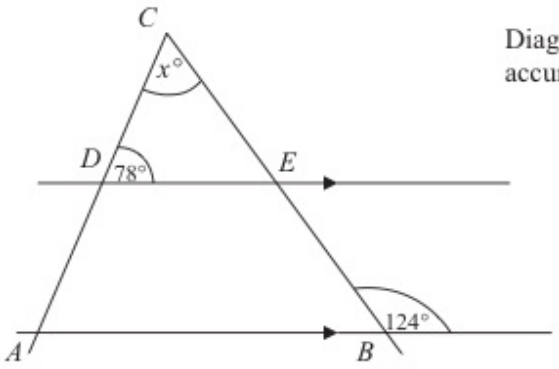


Diagram **NOT** accurately drawn

ABC is a triangle.
DE is a straight line parallel to *AB*.

Work out the value of *x*.

.....

(2)

Give reasons for your answer.

.....

.....

(1) **Q4**

(Total 3 marks)

5

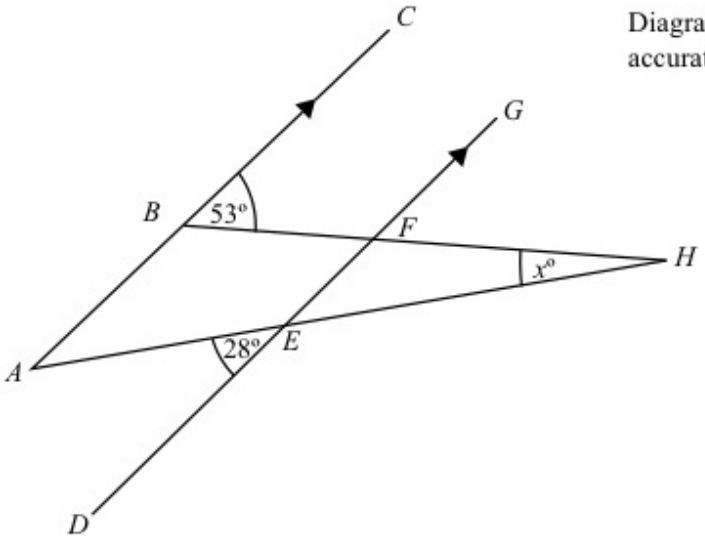


Diagram **NOT** accurately drawn

ABC and *DEFG* are parallel.
AEH and *BFH* are straight lines.

Work out the size of the angle marked $x°$.

.....°

(Total for Question 5 is 3 marks)

6 (a) Solve $5x + 2 = 2x + 17$

(2)

x = ...

(b) Solve the inequality $3(2y + 1) > 10$

(2)

.....

(Total for Question 6 is 4 marks)

Leave blank

10.

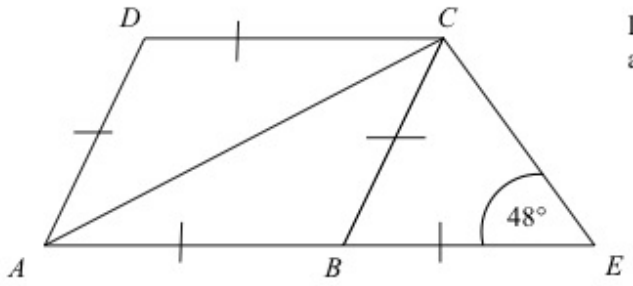


Diagram **NOT** accurately drawn

ABCD is a rhombus.
BCE is an isosceles triangle.
ABE is a straight line.

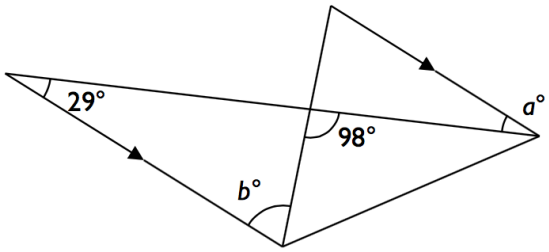
Work out the size of angle *DCA*.

..... °

(Total 3 marks)

Q10

12. Find the value of a and b. [2]



$a =$ _____

$b =$ _____