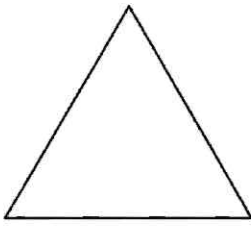
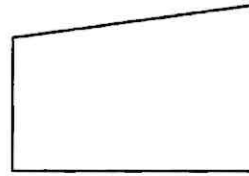


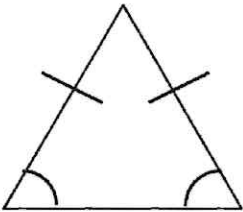
Angles in parallel lines exam questions



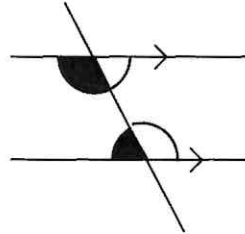
Angles in a **triangle**
equal 180°



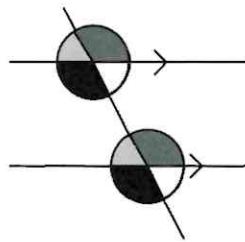
Angles in a **quadrilateral**
equal 360°



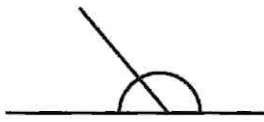
Base angles in an **isosceles triangle**
are equal



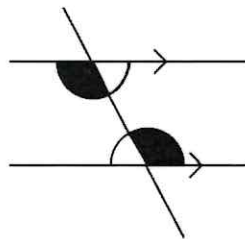
C-shape **co-interior**
angles add up to
 180°



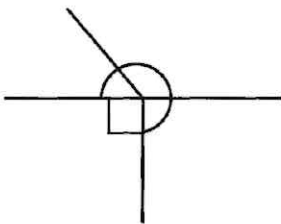
F-shaped
corresponding
angles are equal



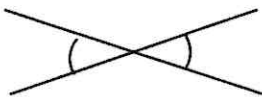
Angles on a
straight line equal
 180°



Z-shaped **alternate**
angles are equal



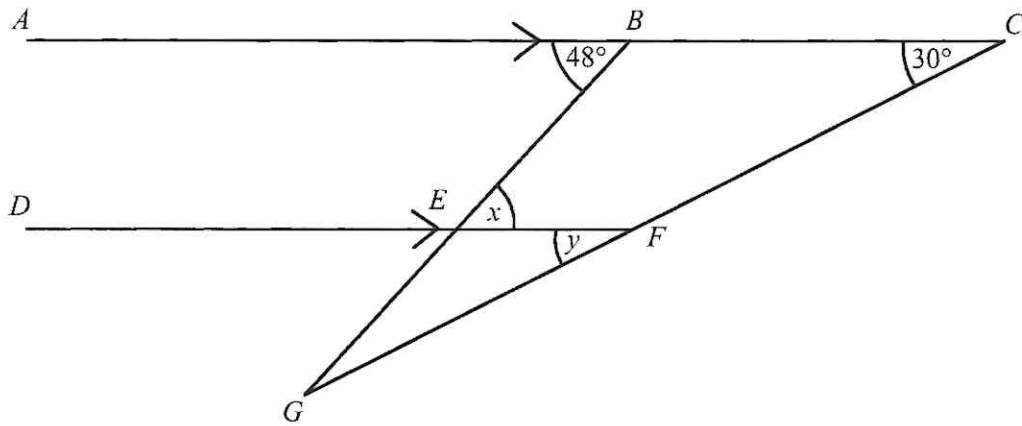
Angles **around a**
point equal 360°



Vertically opposite
angles are equal

1.

Diagram NOT accurately drawn



BEG and CFG are straight lines. ABC is parallel to DEF . Angle $ABE = 48^\circ$. Angle $BCF = 30^\circ$.

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

$x = 48^\circ$

(ii) Give a reason for your answer.

Alternate angles are equal

(2)

(b) (i) Write down the size of the angle marked y .

$y = 30^\circ$

(ii) Give a reason for your answer.

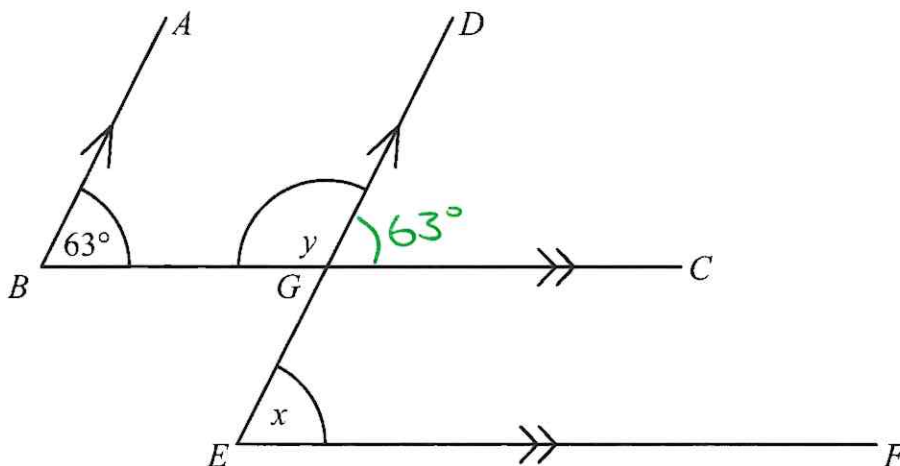
Corresponding angles are equal

(2)

(Total 4 marks)

2.

Diagram NOT accurately drawn



BA is parallel to EGD. BGC is parallel to EF. Angle ABC = 63° .

(a) (i) Find the size of angle x.

..... 63°

(ii) Give a reason for your answer.

..... Corresponding angles are equal

.....

(2)

(b) Work out the size of angle y.

..... 117°

(1)

(Total 3 marks)

3.

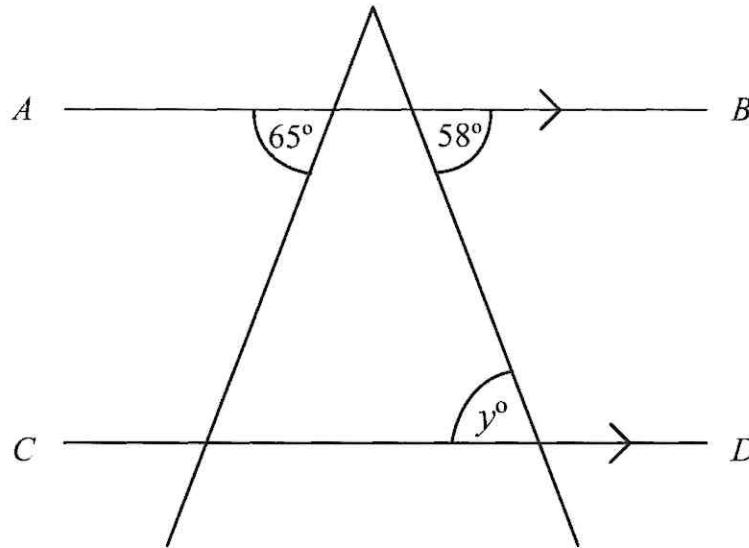


Diagram NOT accurately drawn

AB is parallel to CD.

(i) Write down the value of y.

..... 58°

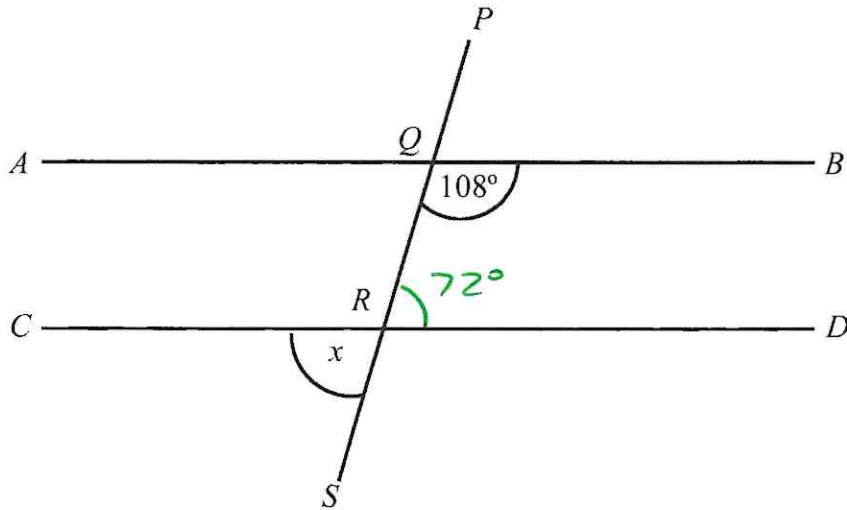
(ii) Give a reason for your answer.

..... Alternate angles are equal

(Total 2 marks)

4.

Diagram NOT accurately drawn



AB is parallel to CD .

Explain why angle x is 72° .

Co-interior angles sum to 180° and vertically opposite angles are equal

(Total 2 marks)

5.

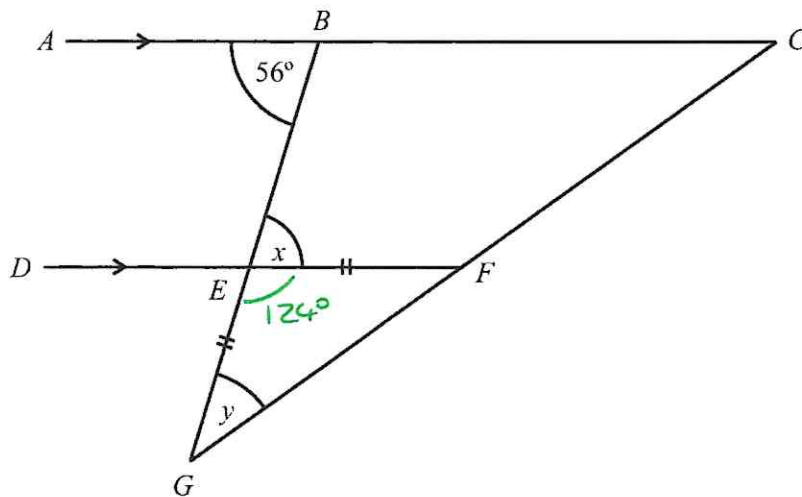


Diagram NOT accurately drawn

BEG and CFG are straight lines. ABC is parallel to DEF . Angle $ABE = 56^\circ$. $EF = EG$

(a) (i) Write down the size of the angle marked x

$x = \dots 56 \dots^\circ$

(ii) Give a reason for your answer.

Alternate angles are equal

(2)

(a) (i) Write down the size of the angle marked y

$y = \dots 28 \dots^\circ$

(ii) Give a reason for your answer.

..... Angles on a straight line sum to 180° , base
..... angles in an isosceles triangle are equal,
..... angles in a triangle sum to 180°

(2)
(Total 5 marks)

6.

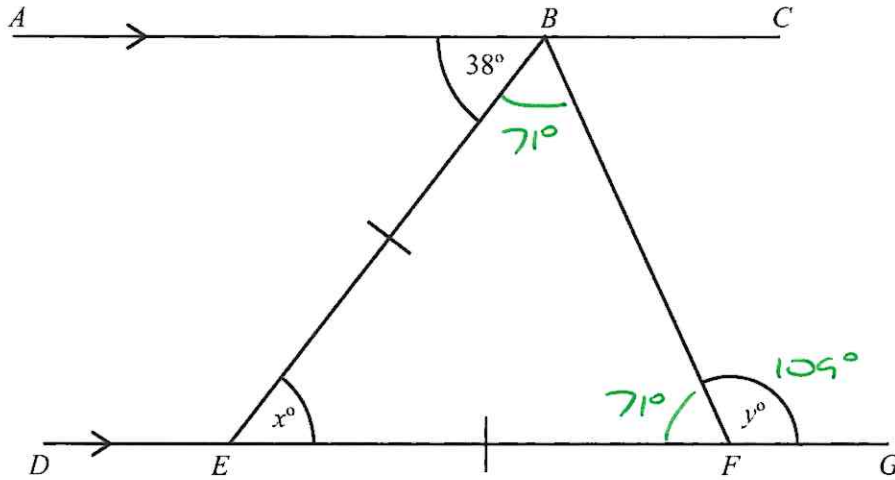


Diagram **NOT** accurately drawn

ABC is parallel to $DEFG$.

$BE = EF$.

Angle $ABE = 38^\circ$.

(a) (i) Find the value of x .

$x = \dots 38 \dots$

(ii) Give a reason for your answer.

..... Alternate angles are equal

(2)

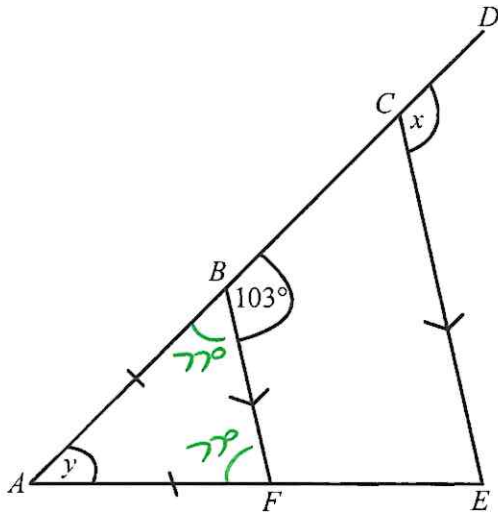
(b) Work out the value of y .

$y = \dots 109 \dots$

(2)
(Total 4 marks)

7.

Diagram **NOT** accurately drawn



$ABCD$ and AFE are straight lines. BF is parallel to CE . Angle $CBF = 103^\circ$. $AB = AF$.

(a) (i) Find the size of angle x .

..... 103^o

(ii) Give a reason for your answer.

..... Corresponding angles are equal

(2)

(b) Find the size of angle y .

..... 26^o

(2)

(Total 4 marks)

8.

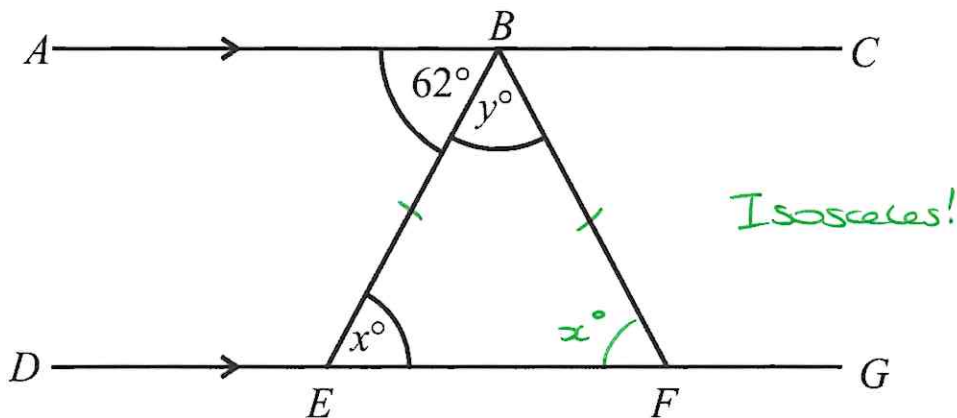


Diagram **NOT** accurately drawn

ABC and $DEFG$ are straight lines. AC is parallel to DG . $BE = BF$. Angle $ABE = 62^\circ$.

(a) (i) Find the value of x .

$x = \dots\dots\dots 62^\circ \dots\dots\dots$

(ii) Give a reason for your answer.

$\dots\dots\dots$ Alternate angles are equal $\dots\dots\dots$

(2)

(b) Work out the value of y .

$y = \dots\dots\dots 56^\circ \dots\dots\dots$

(2)

(Total 4 marks)

9.

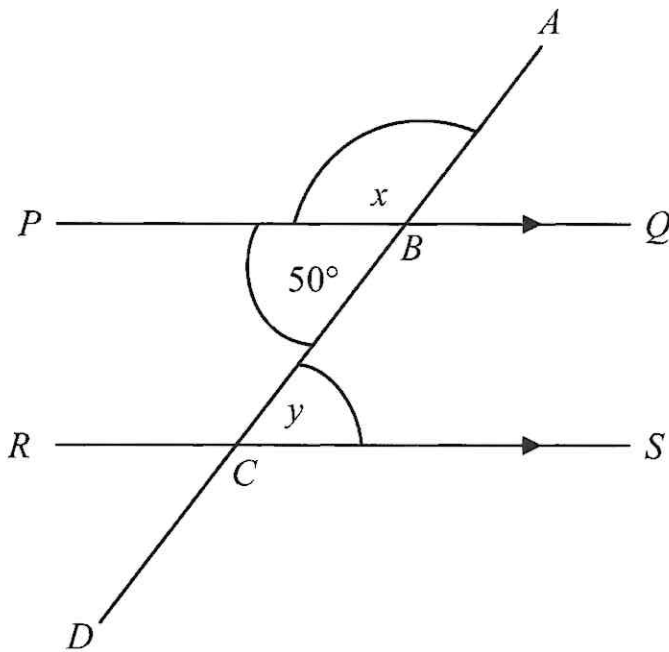


Diagram **NOT** accurately drawn

$ABCD$ is a straight line. PQ is parallel to RS .

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

$\dots\dots\dots 130 \dots\dots\dots^\circ$

(ii) Give a reason for your answer.

$\dots\dots\dots$ Angles on a straight line sum to 180° $\dots\dots\dots$

$\dots\dots\dots$

(2)

(b) (i) Write down the size of the angle marked y .

.....⁵⁰.....°

(ii) Give a reason for your answer.

.....Alternate angles are equal.....

.....

(2)
(Total 4 marks)