



Name: _____ **Date:** _____ **Score:** _____ / 38

- 1** The diagram shows triangle ABC .
- Use three letters to name the marked angle.
 - Write down the side opposite the vertex A .
 - Use three letters to name the angle between the sides AC and BC .

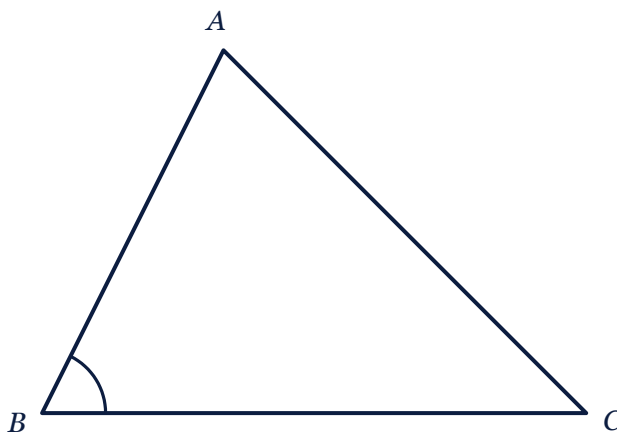


Diagram NOT accurately drawn

(3 marks)

Answer _____

- 2** Two angles fit together on a straight line. One of the angles is 64° and the other angle is y° .
- Work out the value of y .
 - Give a reason for your answer.

(2 marks)

Answer _____

- 3 Three angles meet at a point. Two of the angles are 145° and 118° . The third angle is x° .

Work out the value of x . Give a reason for your answer.

(2 marks)

Answer _____

- 4 The diagram shows two straight lines crossing.

Work out the sizes of the angles a , b and c . Give a reason for each answer.

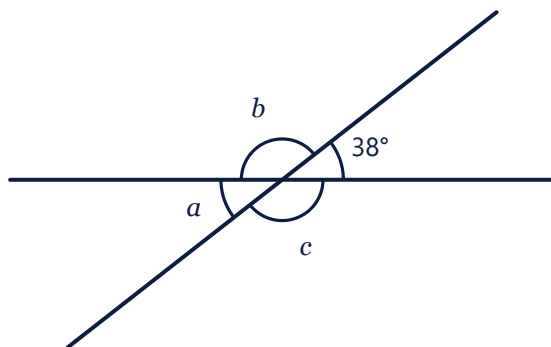


Diagram NOT accurately drawn

(3 marks)

Answer _____

- 5 The line AB is perpendicular to the line CD . They cross at O . The straight line EF also passes through O .

Angle $BOE = 27^\circ$.

- Work out the size of angle x . Give a reason.
- Work out the size of angle y . Give a reason.

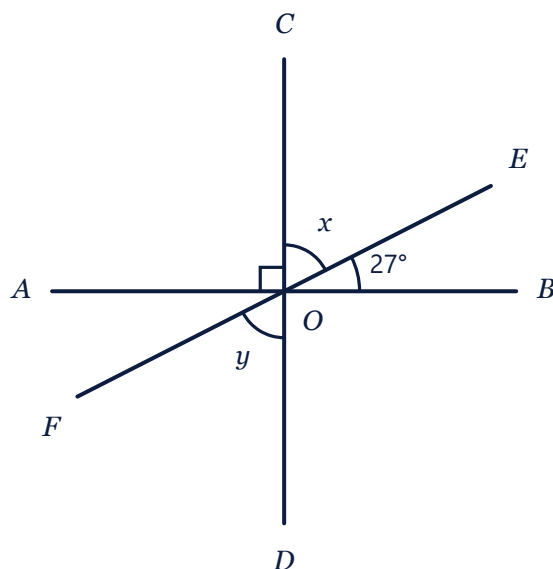


Diagram NOT accurately drawn

(3 marks)

Answer _____

6

The diagram shows two parallel lines crossed by a straight line.

Work out the sizes of the angles a , b and c . For each one, give a reason.

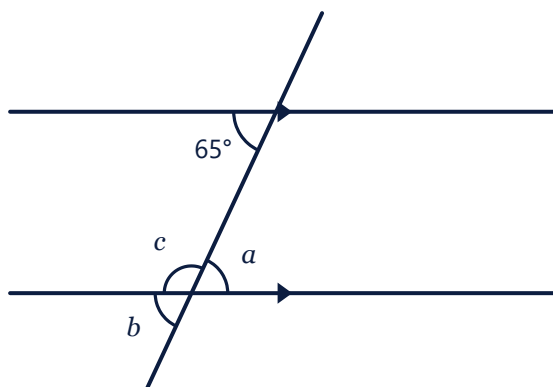


Diagram NOT accurately drawn

(4 marks)

Answer

7

The diagram shows two parallel lines crossed by a straight line.

One of the marked angles is 71° . The angle marked x° is the co-interior angle between the parallel lines on the same side of the crossing line.

Work out the value of x . Give a reason for your answer.

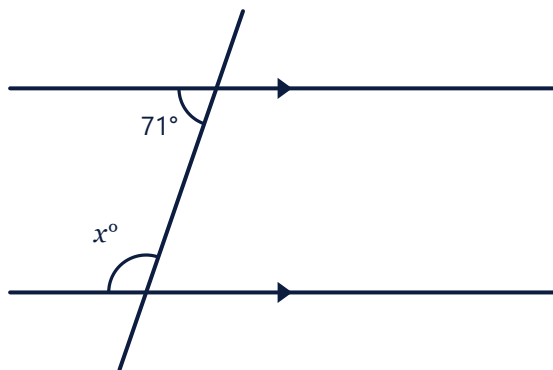


Diagram NOT accurately drawn

(3 marks)

Answer

8

The diagram shows two parallel lines crossed by a straight line. Two of the angles are marked.

- Write down why $(3x - 10)^\circ = (2x + 25)^\circ$.
- Work out the size of each marked angle.

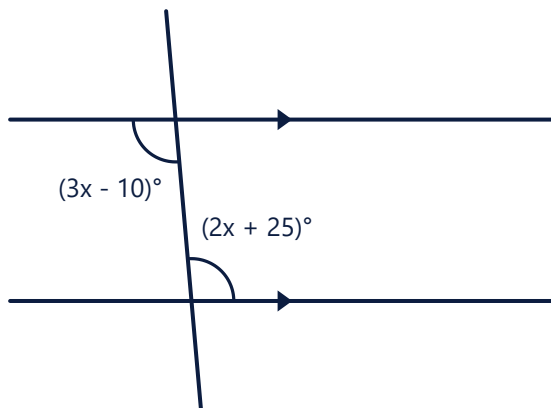


Diagram NOT accurately drawn

(3 marks)

Answer _____

9 AB and CD are parallel straight lines.

A straight line crosses AB at E and crosses CD at F. On line AB, A is to the left of E and B is to the right of E. On line CD, C is to the left of F and D is to the right of F.

Angle AEF = 62° .

Work out the size of angle CFE.

Give a reason for each stage of your working.

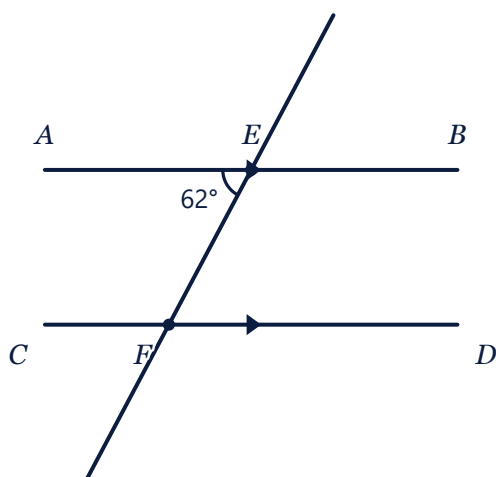


Diagram NOT accurately drawn

(4 marks)

Answer _____

10 DE and FG are parallel straight lines.

Triangle ABC is drawn so that A lies on DE, and B and C both lie on FG.

D is to the left of A and E is to the right of A.

Angle DAB = 48° and angle ACB = 63° .

Work out the size of angle BAC.

Give a reason for each stage of your working.

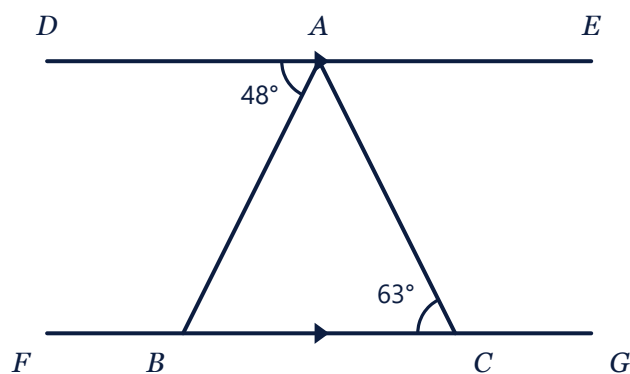


Diagram NOT accurately drawn

(4 marks)

Answer _____

11

A straight line crosses line AB at the point P and crosses line CD at the point Q, where P is above Q. On line AB, B is to the right of P. On line CD, D is to the right of Q.

Angle QPB, between PQ and PB and inside the region between the two lines, is 104° .

Angle PQD, between QP and QD and inside the region between the two lines, is 76° .

Show that AB is parallel to CD.

Give reasons for your answer.

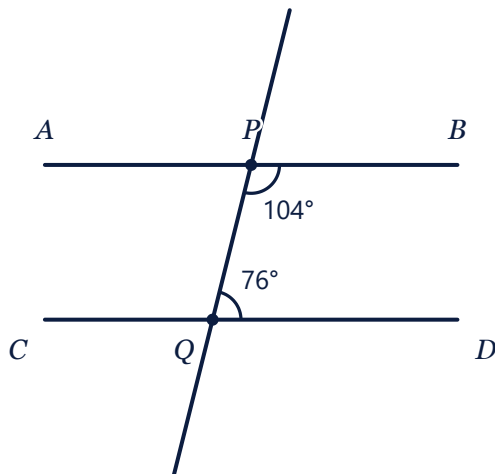


Diagram NOT accurately drawn

(4 marks)

Answer _____

- 12 The diagram shows triangle ABC . The line DAE is drawn through A , parallel to BC . The angles of the triangle are p , q and r . Show that $p + q + r = 180^\circ$. Give a reason for each step.

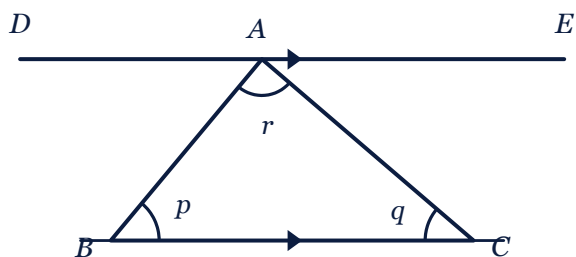


Diagram NOT accurately drawn

(3 marks)

Answer _____

End of questions | Total 38 marks