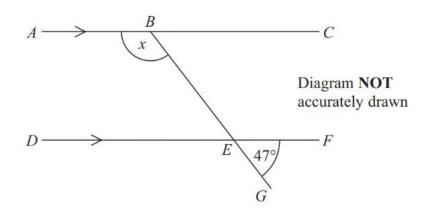
Year-8 Mathematics

Lines and Angles-Worksheet

<u>www.tutorfor.co</u> Time: 1 hour

01)



ABC and DEF are parallel lines.

BEG is a straight line.

Angle $GEF = 47^{\circ}$.

Work out the size of the angle marked x.

Give reasons for your answer.

(2)

02)

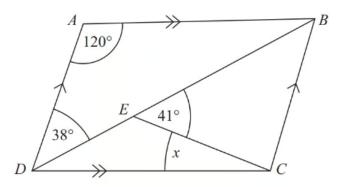


Diagram **NOT** accurately drawn

ABCD is a parallelogram.

Angle $ADB = 38^{\circ}$.

Angle $BEC = 41^{\circ}$.

Angle $DAB = 120^{\circ}$.

Calculate the size of angle *x*.

You must give reasons for your answer.

(2)

03)

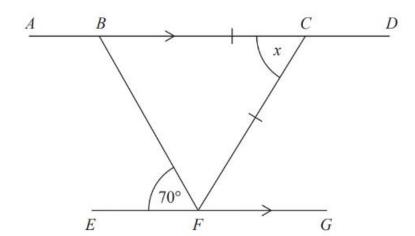


Diagram **NOT** accurately drawn

ABCD and EFG are parallel lines.

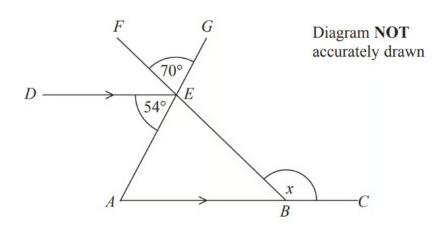
BC = CF

Angle $BFE = 70^{\circ}$

(2)

Work out the size of the angle marked *x*. Give reasons for each stage of your working.

04)



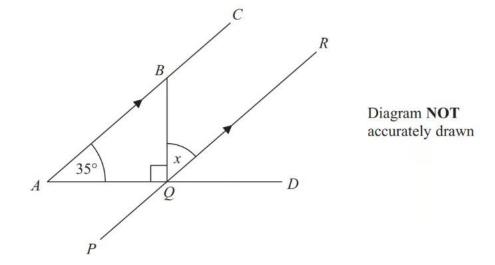
ABC and DE are parallel lines. AEG and BEF are straight lines.

Angle $AED = 54^{\circ}$

Angle $FEG = 70^{\circ}$

Work out the size of the angle marked *x*. Give a reason for each stage of your working.

(2)



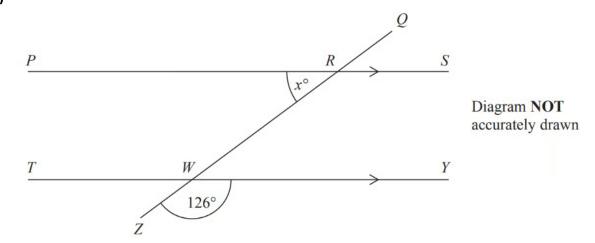
ABC, PQR and AQD are straight lines. ABC is parallel to PQR.

Angle
$$BAQ = 35^{\circ}$$

Angle $BQA = 90^{\circ}$

Work out the size of the angle marked *x*. Give reasons for each stage of your working.

06)

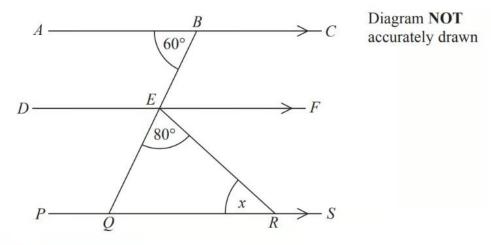


PRS and *TWY* are parallel straight lines. *QRWZ* is a straight line.

(2)

Work out the value of *x*. Give reasons for your answer.

07)



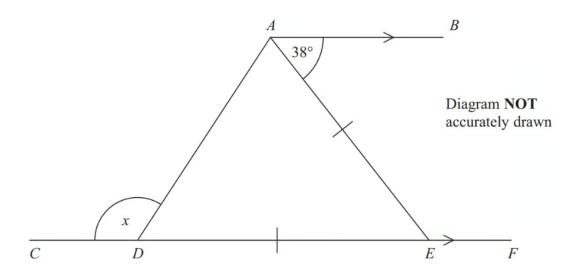
ABC, DEF and PQRS are parallel lines. BEQ is a straight line.

Angle
$$ABE = 60^{\circ}$$

Angle $QER = 80^{\circ}$

Work out the size of the angle marked x. Give reasons for each stage of your working.



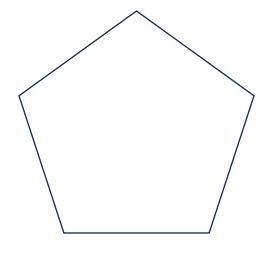


CDEF is a straight line. AB is parallel to CF.

$$DE = AE. (2)$$

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

09) The following polygon is a regular pentagon. Find the size of an interior angle.



(2)

10) Find the size of an exterior angle of the above polygon.

(2)

Total = 20 Marks

****End****