

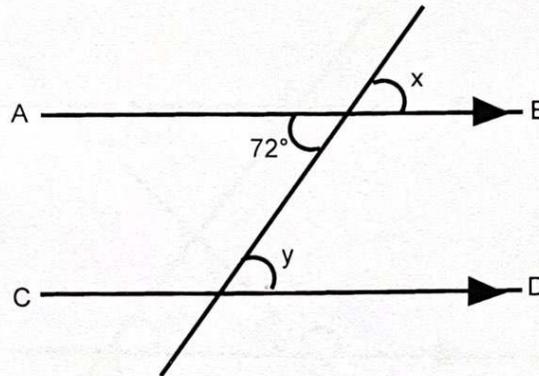


General practice

QT Angles in Parallel Lines

1. AB and CD are parallel lines.

- (a) Write down the size of angle x.
- (b) Give a reason for your answer.
- (c) Write down the size of angle y.
- (d) Give a reason for your answer.

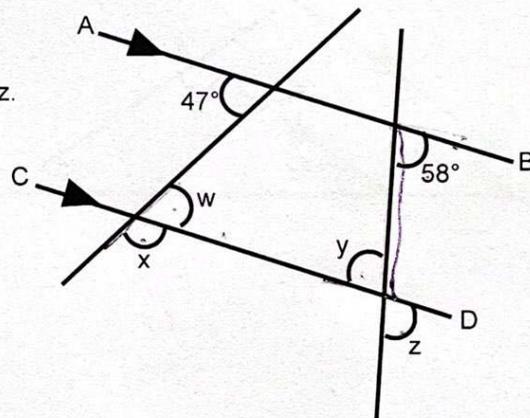


- (a) 72°
- (b) ~~98~~
- (c) 72°
- (d) corresponding to a

2. AB and CD are parallel lines.

Write down the sizes of angles w, x, y and z.

Give a reason for each of your answers.

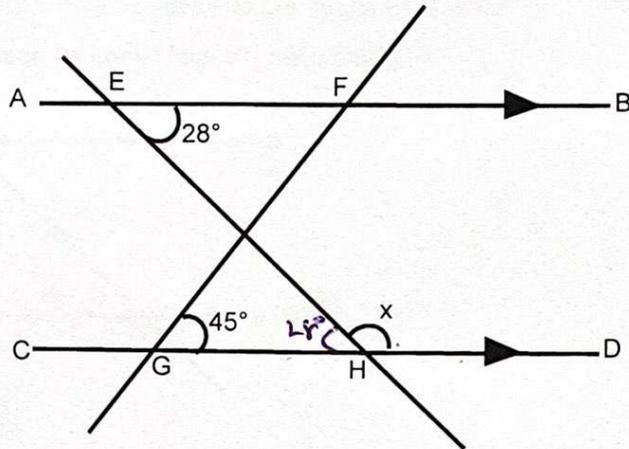


- $w = 47^\circ$
- $x = 133^\circ$
- $y = 58^\circ$
- $z = 58^\circ$



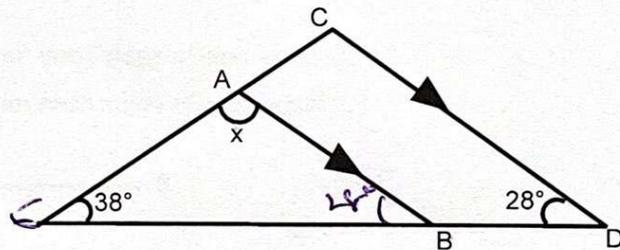
3. AB and CD are parallel lines.
Find the size of angle x.
Give a reason for your answer.

$$x = 180 - 28^\circ$$
$$= \underline{\underline{152^\circ}}$$



4. AB and CD are parallel lines.
Find the size of angle x.
Give a reason for your answer.

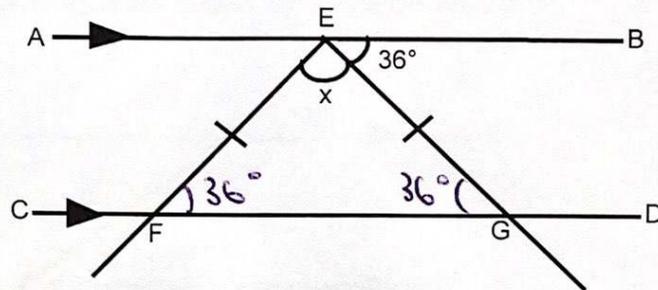
$$\triangle ABC = 180^\circ$$
$$x = 180 - 38 - 28 = \underline{\underline{114^\circ}}$$





5. AB and CD are parallel lines. EFG is an isosceles triangle. Angle BEG = 36° .

Find the size of angle x. Give a reason for each stage of your working.

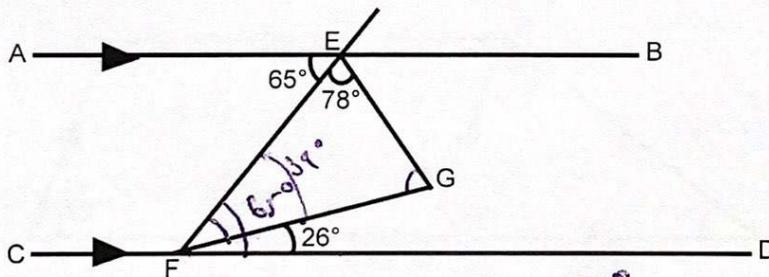


$$\begin{aligned}x &= 180 - 36 - 36 \\ &= \underline{\underline{108^\circ}}\end{aligned}$$

6. AB and CD are parallel lines.

(a) Find the size of EFG. Give a reason for each stage of your working.

(b) Find the size of EGF. Give a reason for each stage of your working.

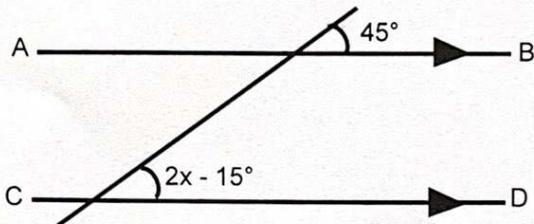


$$(a) \angle EFG = 65 - 26 = 39^\circ$$

$$(b) 180 - 39 - 78 = 63^\circ \angle EGF.$$

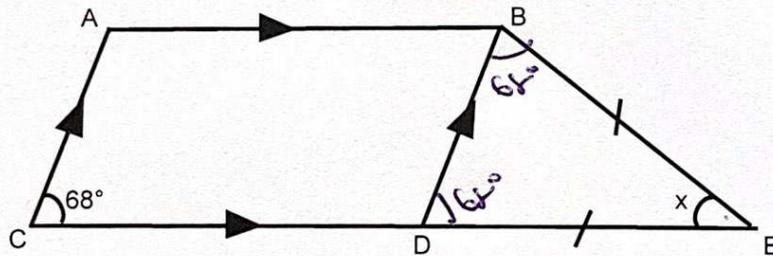


7. AB and CD are parallel lines. Find the value of x.



$$\begin{aligned} 2x - 15 &= 45 \\ +15 & \quad +15 \\ \hline 2x &= 60 \\ \div 2 & \quad \div 2 \\ \hline x &= 30 \end{aligned}$$

8. AB and CD are parallel lines. Find the value of x. Give reasons for each step of your working.



$$\begin{aligned} x &= 180 - 68 - 68 \\ &= 44 \end{aligned}$$