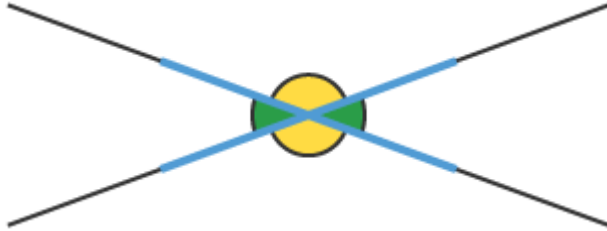


Lesson Plan

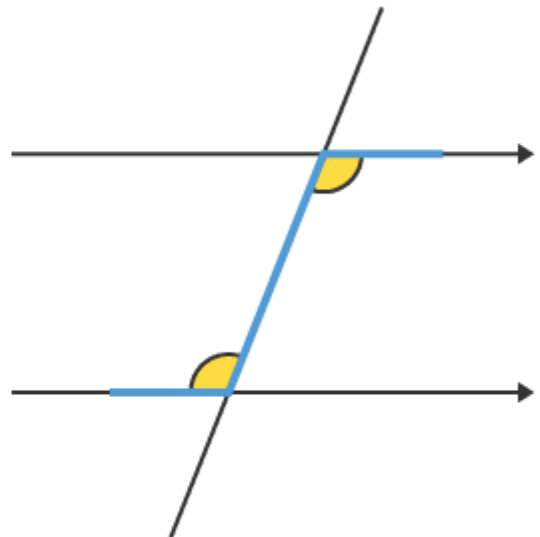
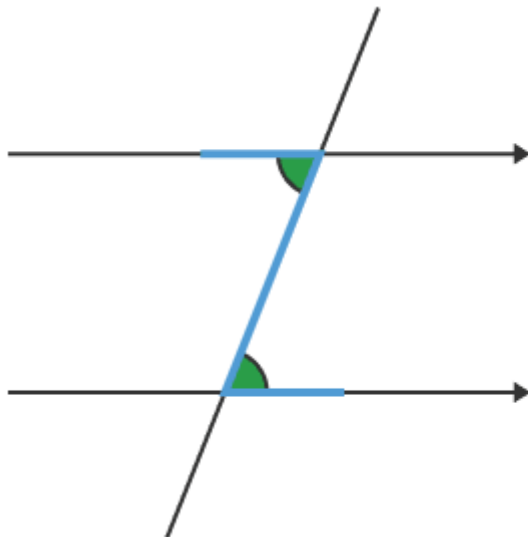
Finding angles

Intersecting lines are lines that **cross** each other. **Parallel lines** are lines that **never cross** each other - they keep the same distance apart from each other.

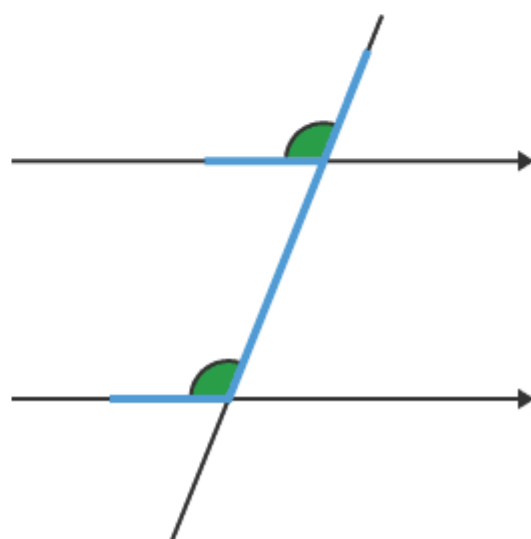
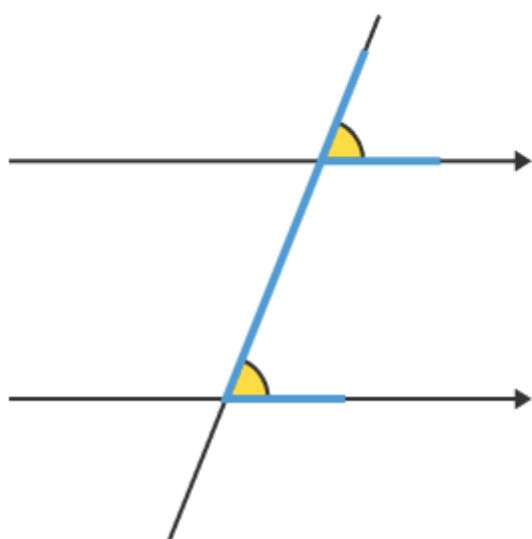
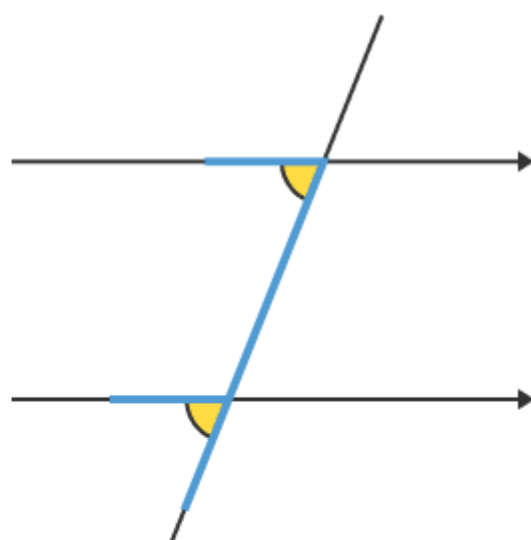
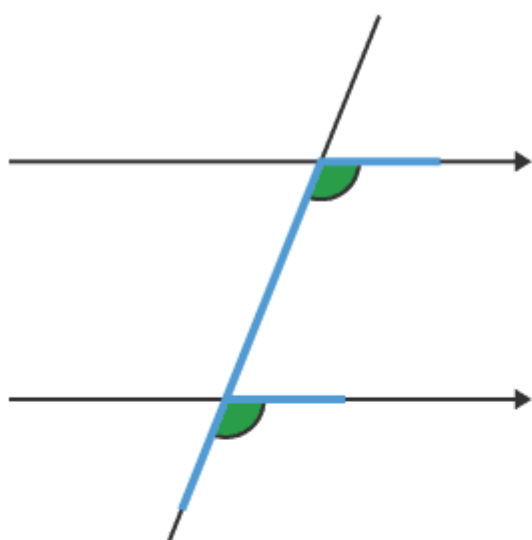
When two lines intersect, the opposite (X) angles are equal:



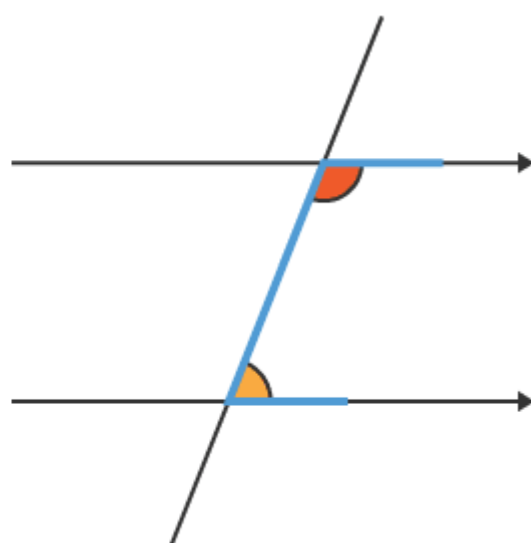
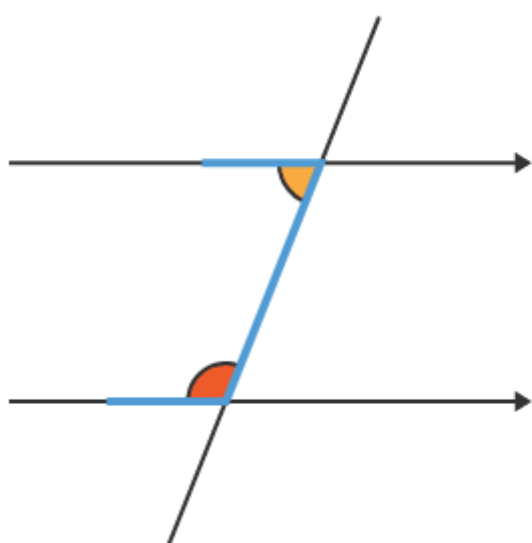
On parallel lines, alternate (Z) angles are equal:



On parallel lines, corresponding (F) angles are equal:



On parallel lines, co-interior (C) angles add up to 180° :



Parallel and equal lines

Parallel lines are marked with **arrows**.

A line which crosses a pair of parallel lines is called a **transversal**.

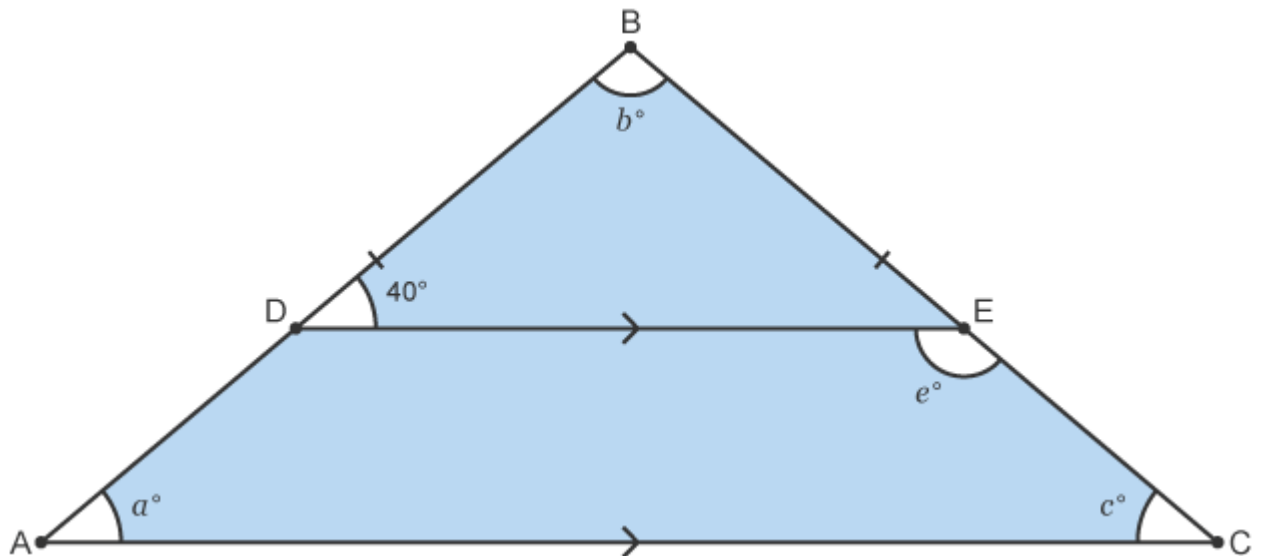


Lines of equal length are marked with **dashes**.



Question

In the following diagram, DE is parallel to AC, and $AB = CB$.



- Find the size of angle a . Give a reason for your answer.
- Find the size of angle c . Give a reason for your answer.
- Find the size of angle b . Give a reason for your answer.
- Find the size of angle e . Give a reason for your answer.