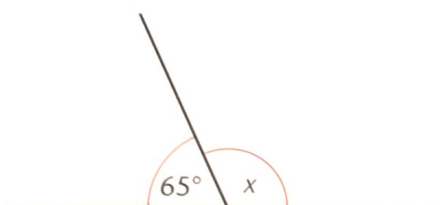


**TARGET** To find the missing angles at a point and on a straight line.

## Examples

### ANGLES ON A STRAIGHT LINE

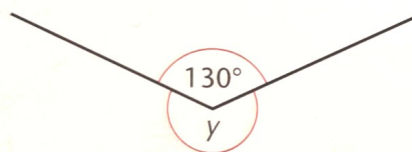
The sum of the angles at a point on a straight line is  $180^\circ$ .



$$\begin{aligned} x &= 180^\circ - 65^\circ \\ &= 115^\circ \end{aligned}$$

### ANGLES AT A POINT

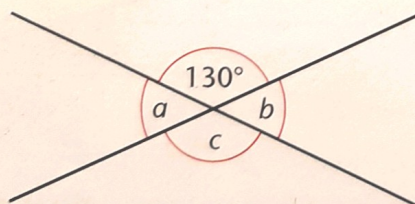
A whole turn is  $360^\circ$ .



$$\begin{aligned} y &= 360^\circ - 130^\circ \\ &= 230^\circ \end{aligned}$$

### OPPOSITE ANGLES

When two straight lines intersect at a point opposite angles are equal.



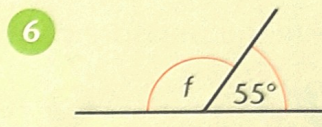
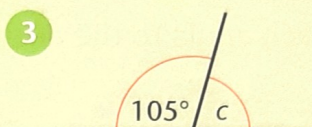
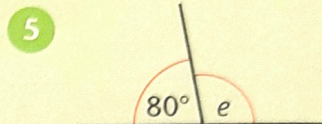
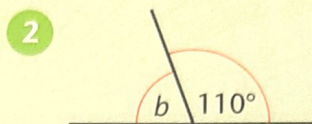
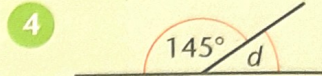
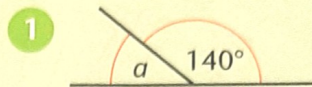
$$\begin{aligned} a &= 180^\circ - 130^\circ \\ &= 50^\circ \end{aligned}$$

$$\begin{aligned} b &= 180^\circ - 130^\circ \\ &= 50^\circ \end{aligned}$$

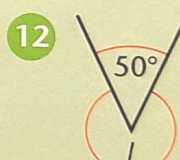
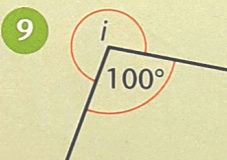
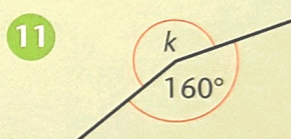
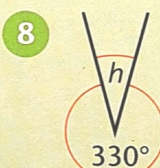
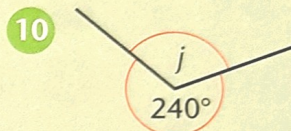
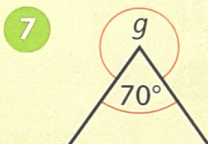
$$\begin{aligned} c &= 360^\circ - 130^\circ - 50^\circ - 50^\circ \\ &= 360^\circ - 230^\circ \\ &= 130^\circ \end{aligned}$$

## A

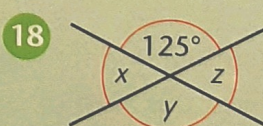
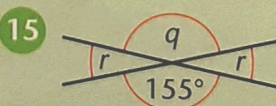
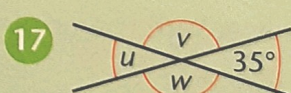
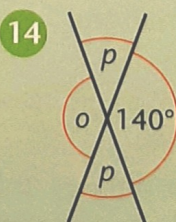
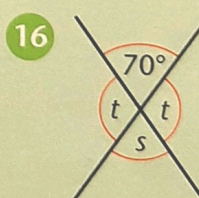
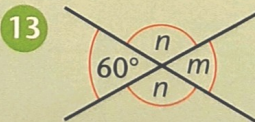
Find the missing angles.



Find the missing angles.

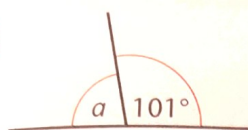
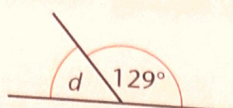
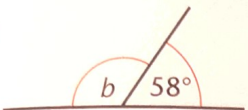
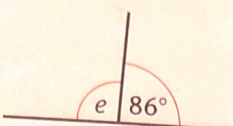
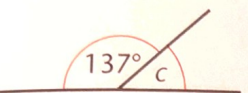
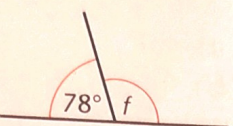


Find the missing angles.

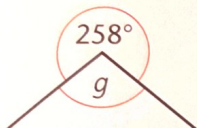
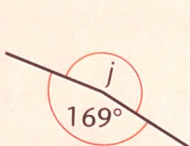
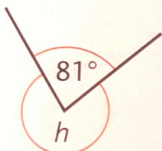
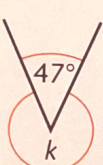


**B**

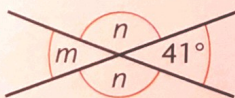
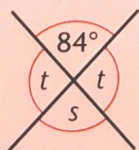
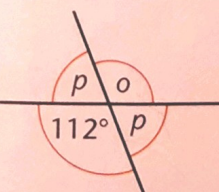
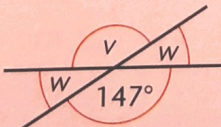
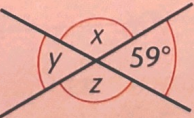
Find the missing angles marked with the letters.

**1****4****2****5****3****6**

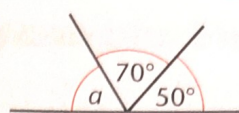
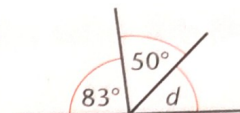
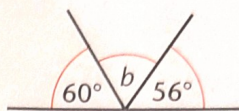
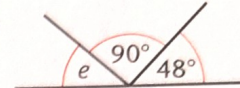
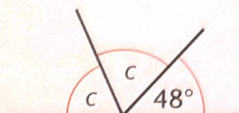
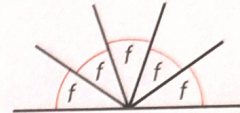
Find the missing angles.

**7****10****8****11****9****12**

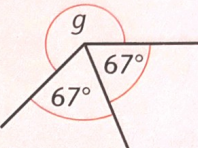
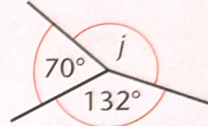
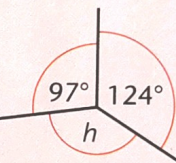
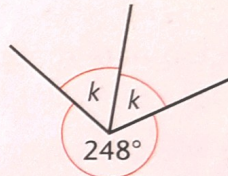
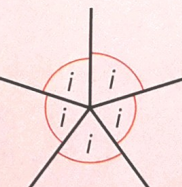
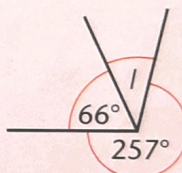
Find the missing angles.

**13****16****14****17****15****18****C**

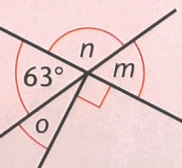
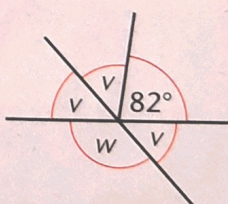
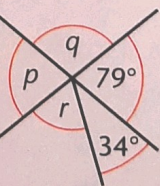
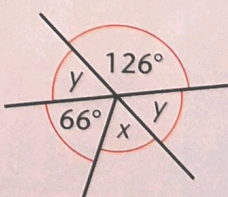
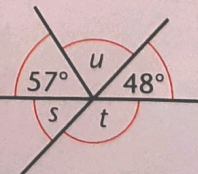
Calculate the missing angles.

**1****4****2****5****3****6**

Calculate the missing angles.

**7****10****8****11****9****12**

Calculate the missing angles.

**13****16****14****17****15****18**