

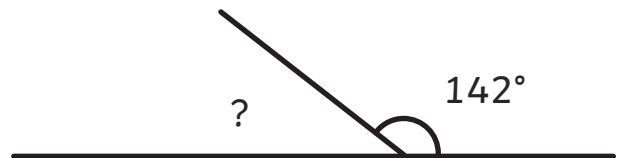
# Finding Missing Angles

**Angles on a straight line always add up to  $180^\circ$**



$$180^\circ - 117^\circ = 63^\circ$$

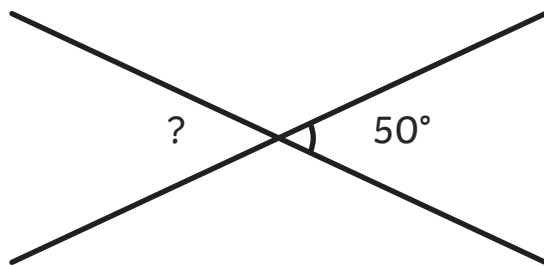
The missing angle is  $63^\circ$ .



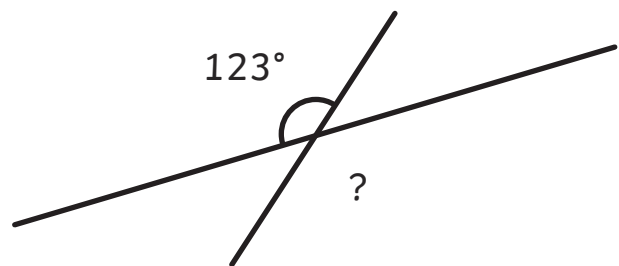
$$180^\circ - 142^\circ = 38^\circ$$

The missing angle is  $38^\circ$ .

**Missing Vertically Opposite Angles**  
**Opposite angles are equal.**

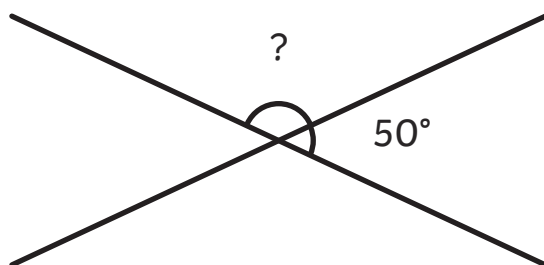


The missing angle is  $50^\circ$ .



The missing angle is  $123^\circ$ .

**Angles around a point total  $360^\circ$**

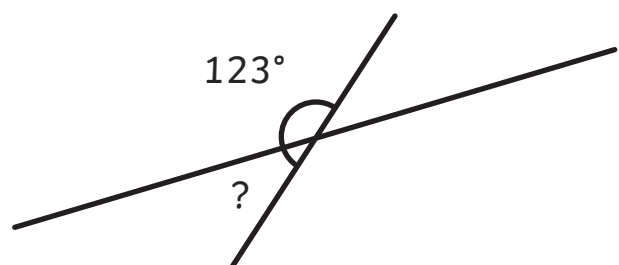


The two known opposite angles total  $100^\circ$ .

$$360^\circ - 100^\circ = 260^\circ$$

$$260^\circ \div 2 = 130^\circ$$

The missing angle is  $130^\circ$ .



The two known opposite angles total  $246^\circ$ .

$$360^\circ - 246^\circ = 114^\circ$$

$$114^\circ \div 2 = 57^\circ$$

The missing angle is  $57^\circ$ .