# Straight-line angles

6 questions | 9 marks

Equivalent correct methods earn the corresponding marks.

**1.** Two adjacent angles form a straight angle. One is $72^\circ$. Find the other. [1 mark]

$180^\circ - 72^\circ = 108^\circ$.

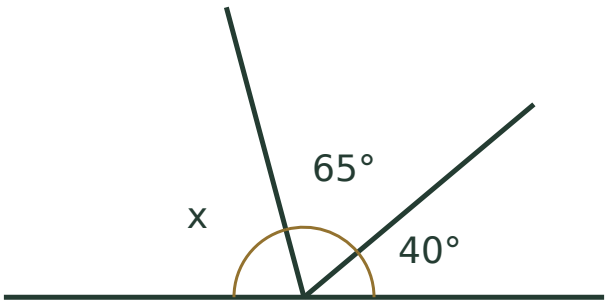
**Answer:** $108^\circ$

**2.** One of two adjacent angles on a straight line is $137^\circ$. Find its neighbour. [1 mark]

$180^\circ - 137^\circ = 43^\circ$.

**Answer:** $43^\circ$

**3.** A straight angle is split into $40^\circ$, $65^\circ$ and $x$. Find $x$. [2 marks]




Adjacent angles on a straight line

$40^\circ + 65^\circ = 105^\circ$.

$180^\circ - 105^\circ = 75^\circ$.

**Answer:** $75^\circ$

**4.** Two equal angles fill a straight angle. Find each angle. [1 mark]

$180^\circ$ shared equally between two angles gives $90^\circ$ each.

**Answer:** $90^\circ$

**5.** Can two adjacent angles of $95^\circ$ and $85^\circ$ fill a straight angle? Explain. [2 marks]

$95^\circ + 85^\circ = 180^\circ$, so they can fill the half-turn.

**Answer:** Yes.

**6.** Noah says the angle next to a $48^\circ$ angle on a straight line is $228^\circ$, because $180 + 48 = 228$. Correct his method and answer. [2 marks]

The parts together total $180^\circ$.

$180^\circ - 48^\circ = 132^\circ$.

$48^\circ + 132^\circ = 180^\circ$.

**Answer:** Subtract instead: the missing angle is $132^\circ$.