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°. Find the other. [1 mark]

180° − 72° = 108°.

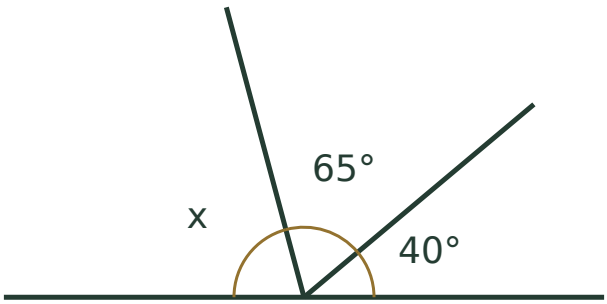
Answer: 108°

2. One of two adjacent angles on a straight line is 137°. Find its neighbour. [1 mark]

180° − 137° = 43°.

Answer: 43°

3. A straight angle is split into 40°, 65° and x. Find x. [2 marks]



Adjacent angles on a straight line

40° + 65° = 105°.

180° − 105° = 75°.

Answer: 75°

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

180° shared equally between two angles gives 90° each.

Answer: 90°

5. Can two adjacent angles of 95° and 85° fill a straight angle? Explain. [2 marks]

95° + 85° = 180°, so they can fill the half-turn.

Answer: Yes.

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

The parts together total 180°.

180° − 48° = 132°.

48° + 132° = 180°.

Answer: Subtract instead: the missing angle is 132°.