

Stage 5 Cambridge Primary Mathematics Progression Practice

Thursday 20 August 2026

Paper Focus: 5Gg.08 — Angles on a Straight Line (180°)

Time Allowed: 30 Minutes | **Total Marks:** 20 Marks

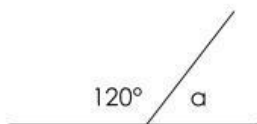
Question 1 [1 Mark]

Complete the sentence below:

The sum of the angles at a point on a straight line is equal to _____ $^\circ$. [1]

Question 2 [1 Mark]

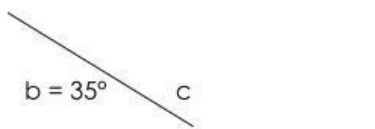
Calculate the size of missing angle a .



Answer: $a =$ _____ $^\circ$ [1]

Question 3 [2 Marks]

Here is a straight line. Angle b is an acute angle measuring 35° .



(a) What type of angle is angle c ? Tick ($\checkmark$) the correct box. [1]

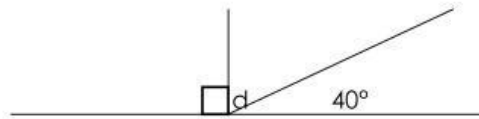
Acute ☐ Right ☐ Obtuse ☐ Reflex ☐

(b) Calculate the size of angle c . [1]

Answer: $c =$ _____ $^\circ$

Question 4 [2 Marks]

Look at the diagram showing three angles on a straight line:



(a) State the value in degrees ($^{\circ}$) of the angle marked with the square symbol. [1]

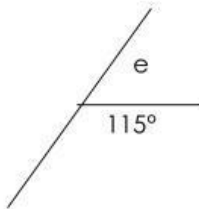
Answer: _____ $^{\circ}$

(b) Calculate the size of angle d . [1]

Answer: $d =$ _____ $^{\circ}$

Question 5 [2 Marks]

Calculate the size of missing angle e on the slanted straight line below.



Answer: $e =$ _____ $^{\circ}$ [2]

Question 6 [2 Marks]

Three angles fit together along a horizontal straight line.

Two of the angles are 55° and 62° .

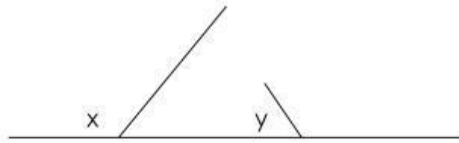
Calculate the size of missing angle f .

Answer: $f =$ _____ $^{\circ}$ [2]

Question 7 (TWM.04 Convincing) [2 Marks]

Mia looks at the diagram below and claims:

"Angle x and Angle y must add up to 180° because they lie on a line."

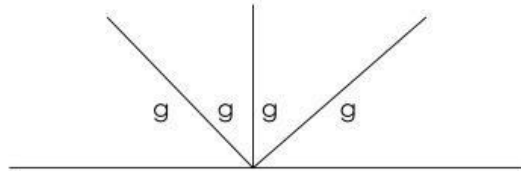


Explain why Mia is **incorrect**.

[2]

Question 8 [2 Marks]

The diagram shows a straight line with four equal-sized missing angles marked g .



Calculate the size of one angle g .

Answer: $g =$ _____ $^{\circ}$ [2]

Question 9 [3 Marks]

Here are four angle measurements:

45 $^{\circ}$ 135 $^{\circ}$ 70 $^{\circ}$ 110 $^{\circ}$

Pair up the measurements that fit together to form angles on a straight line.

(a) _____ $^{\circ}$ and _____ $^{\circ}$ [1]

(b) _____ $^{\circ}$ and _____ $^{\circ}$ [1]

(c) If three identical angles fit on a straight line, what is the size of each angle? [1]

Answer: _____ $^{\circ}$

Question 10 [3 Marks]

A line is split into three adjacent angles:

- The first angle is 42° .
- The second angle is a right angle.
- The third angle is marked k .

(a) Write down a mathematical equation connecting all three angles on the line. [1]

Answer: _____

(b) Calculate the value of k . [2]

Show your working:

Answer: $k =$ _____ $^\circ$