

4 Angle facts – Part 1

Name: _____ Class: _____ Date: _____

Vocabulary 词汇

Write each word three times. 把每个单词抄写三遍。

English	中文	Write it 3 times (English)
degrees	度	_____
vertically opposite	对顶角	_____

Recall

Angles are measured in **degrees** 度. Some angle facts let you find a missing angle without measuring.

New ideas

Read these first, then do the Practice.

■ 1 Angles on a straight line

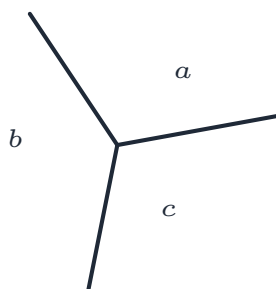
Angles on a straight line add up to 180° :



$$a + b = 180^\circ \text{ (straight line)}$$

■ 2 Angles around a point

Angles around a point add up to 360° :



$$a + b + c = 360^\circ \text{ (round a point)}$$

When two straight lines cross, the **vertically opposite** 对顶角 angles are equal.

Watch out: angles on a **straight line** add to 180° ; angles **around a point** add to 360° — pick the right total. When two lines cross, the **vertically opposite** angles are *equal*.

Practice

Try these in order.

4.1 Angles on a straight line add up to how many degrees? [1]

4.2 Angles around a point add up to how many degrees? [1]

4.3 Two angles on a straight line are 110° and x . Find x . [1]

4.4 Three angles around a point are 90° , 150° and y . Find y . [2]

4.5 Two straight lines cross. One angle is 65° . What is the vertically opposite angle? [1]

4.6 Challenge. Three angles on a straight line are 30° , x and $2x$. Find x . [3]