4 Angle facts – Part 1

Name: _____ Class: _____ Date: _____

Vocabulary

Write each word three times.

English	**Write it 3 times** (English)
degrees	
vertically opposite	

Recall

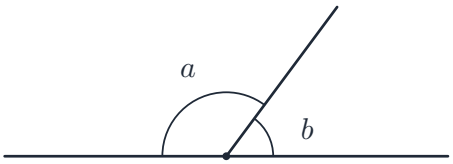
Angles are measured in **degrees** . Some angle facts let you find a missing angle without measuring.

New ideas

Read these first, then do the Practice.

■ 1 Angles on a straight line

Angles on a straight line add up to 180°:

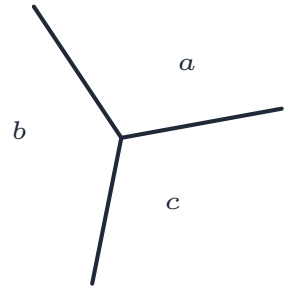


$a + b = 180°$ (angles on a straight line)

■ 2 Angles around a point

Angles around a point add up to 360°:

exercises.lol exercises.com.cn



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

When two straight lines cross, the **vertically opposite** 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]