

Y6 Angles Lines Points

KS2 Y6 Maths · Follows the national curriculum

Name _____ Class _____ Date _____

1. Worked example

Two angles sit on a straight line. One is 125° . Find the other.

Step 1 · Angles on a straight line add to 180°

$$180 - 125$$

Answer: 55°

Check: $125 + 55 = 180$ ✓

2. Now try one with the steps

Two straight lines cross. One angle is 40° . Find the other three.

Step 1 · The angle opposite is vertically opposite

Step 2 · The angles next to it are on a straight line

Answer:

3. Practice

Have a go at each one. There is space underneath to work it out.

1. Two angles are on a straight line. One is 70° . Find the other.

2. Two angles are on a straight line. One is 145° . Find the other.

3. Two angles meet at a point. One is 200° . Find the other.

4. Angles of 90° , 90° , 100° and x meet at a point. Find x .

5. Two lines cross. One angle is 65° . What is the angle vertically opposite it?

6. Two lines cross. One angle is 65° . What is the angle next to it?

7. Angles of 30° , 45° and x are on a straight line. Find x .

8. Angles of 120° , 120° and x meet at a point. Find x .

9. Two lines cross and one angle is 90° . What are the other three angles?

10. Two equal angles, x and x , are on a straight line. Find x .

11. Four equal angles meet at a point. How big is each one?

12. Angles x and $3x$ are on a straight line. Find both angles.

13. Five equal angles meet at a point. How big is each one?

14. Two lines cross. One angle is 4 times the size of the angle next to it. Find the smaller angle.

15. Two lines cross. Could the vertically opposite angles be 80° and 100° ? Explain.

4. Before you hand it in

Subtracting from 360° for angles on a straight line.

Angles on a straight line add to 180° (half a turn). Angles around a point add to 360° (a full turn).

Thinking angles next to each other where lines cross are equal.

Opposite angles (making an X shape) are equal. Neighbouring angles add to 180° .

Measuring with a protractor when the question says the diagram is not to scale.

Calculate using 180° and 360° ; the drawing may not be accurate.