

Y5 Measuring Angles

KS2 Y5 Maths · Follows the national curriculum

Name _____ Class _____ Date _____

1. Worked example

Is 128° acute, obtuse or reflex?

Step 1 · Compare with 90° and 180°

128 is more than 90 and less than 180

Answer: Obtuse

Check: Acute $< 90^\circ$ $<$ obtuse $< 180^\circ$ $<$ reflex $< 360^\circ$ ✓

2. Now try one with the steps

Measure an angle with a protractor.

Step 1 · Put the centre of the protractor on the vertex

Step 2 · Line up the 0° line with one arm

Step 3 · Read the scale that starts at 0 on that arm

Answer:

3. Practice

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

1. What do we call an angle less than 90° ?

2. What do we call an angle between 90° and 180° ?

3. What do we call an angle between 180° and 360° ?

4. Is 45° acute, obtuse or reflex?

5. Is 210° acute, obtuse or reflex?

6. Order these angles from smallest: 95° , 9° , 190° , 59°

7. Which is the best estimate for the angle between the hands of a clock at 2 o'clock: 20° , 60° or 120° ?

8. How many degrees are in a right angle?

9. Draw an angle of 140° . Is it acute, obtuse or reflex?

10. A reflex angle is measured as $360^\circ - 75^\circ$. How big is it?

11. Jake measured an angle that looked acute and got 130° . What mistake did he probably make?

12. What is the angle between the hands of a clock at 4 o'clock (the smaller angle)?

13. A pizza is cut into 8 equal slices. What angle is at the tip of each slice?

14. Name the type of angle made by a half turn and by a three-quarter turn.

4. Before you hand it in

Reading 130° for an angle that is clearly acute.

Find the 0° on the arm you lined up, and follow that scale. Always estimate first: an acute angle must be less than 90° .

Putting the edge of the protractor, not its centre point, on the vertex.

The small cross or dot at the middle of the straight edge goes exactly on the vertex.

Thinking an angle with longer arms is bigger.

An angle measures the amount of turn between the arms, not their length.

Calling 200° obtuse.

Obtuse angles are between 90° and 180° . Angles between 180° and 360° are reflex.