

Max's Magnificent Measurement Adventure

Learning objective: To identify, measure, and draw angles using a protractor, and to calculate missing angles around a point and on a straight line.

Help Max the monkey solve these geometry puzzles. Use your protractor carefully and remember that angles on a straight line add up to 180° and angles around a point add up to 360° .

Word bank: acute · obtuse · reflex · protractor · degrees · straight line · right angle · calculate

1. Max has drawn an angle that measures 42° . Is this an acute, obtuse, or reflex angle? Explain how you know. (2 marks)

2. Max draws a straight line. He marks an angle of 115° on one side. Calculate the size of the missing angle on the other side of the line. (2 marks)

3. Using your protractor, draw an angle of 75° and label it 'Angle A'. (2 marks)

4. There are three angles around a point. Two of the angles are 120° and 95° . What is the size of the third angle? (2 marks)

5. If Max has a right angle and he splits it into two smaller angles, one of which is 35° , what is the size of the other angle? (2 marks)

Draw: Draw a sketch of a triangle where one angle is obtuse and the other two are acute. Label each angle with its estimated size.



Extension challenge: Max challenges you: If you have a square, what is the sum of all its interior angles? Can you use this to explain why the angles in a rectangle must also be 90° ?