

Max's Geometry Garden: Exploring Angles

Learning objective: To identify, compare, and order angles as acute, obtuse, or right angles.

Help Max the monkey organize his garden paths. Use your knowledge of angles to measure and sort the shapes you find. Remember: a right angle is exactly 90 degrees, an acute angle is smaller than a right angle, and an obtuse angle is larger than a right angle but smaller than a straight line.

Max is busy laying out new stone paths in his garden. He wants his garden to be full of interesting shapes. He has noticed that the corners of his stone slabs have different 'bites' taken out of them. Some corners are sharp and pointy, like the tip of a spear. Max calls these acute angles. Other corners are perfectly square, just like the corner of a book. Max calls these right angles. Finally, some corners are wide and open, looking like a hungry mouth. Max calls these obtuse angles. Max needs your help to make sure his garden paths are perfectly aligned!

Word bank: acute · obtuse · right angle · degree · turn · vertex · measure

1. Max finds a stone slab with a perfectly square corner. What is the name of this type of angle? (1 mark)

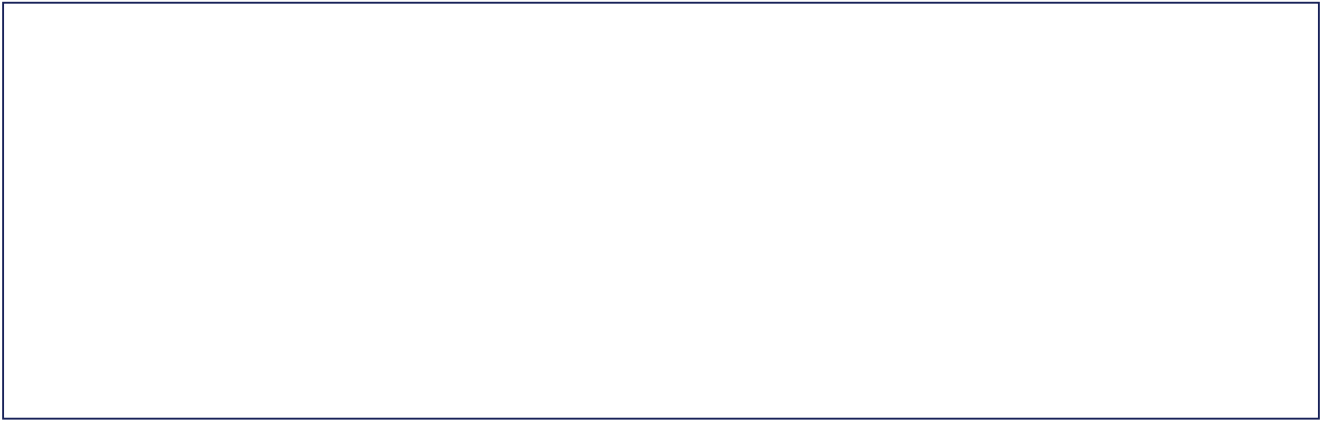
2. Look at an angle that measures 45 degrees. Is this an acute or obtuse angle? Explain how you know. (2 marks)

3. Max has an angle that is 120 degrees. Is this angle smaller or larger than a right angle? (1 mark)

4. Order these angles from smallest to largest: 90 degrees, 45 degrees, 135 degrees. (2 marks)

5. If Max turns 90 degrees to the right, what type of angle has he created with his movement? (1 mark)

Draw: Draw a garden gate that has one acute angle, one right angle, and one obtuse angle. Label each angle clearly.



Extension challenge: Max wants to build a triangular flower bed. Can you draw a triangle that contains one right angle? What do you notice about the other two angles in that triangle?