

## Year 6 – Summer Block 1 – Properties of Shape – Introduce Angles

### About This Resource:

This PowerPoint has been designed to support your teaching of this small step. It includes a starter activity and an example of each question from the Varied Fluency and Reasoning and Problem Solving resources also provided in this pack. You can choose to work through all examples provided or a selection of them depending on the needs of your class.

### National Curriculum Objectives:

Mathematics Year 6: (6G3a) [Draw 2-D shapes using given dimensions and angles](#)

Mathematics Year 6: (6G2a) [Compare and classify geometric shapes based on their properties and sizes](#)

Mathematics Year 6: (6G4b) [Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles](#)

More [Year 6 Properties of Shapes](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

Year 6 – Summer Block 1 – Properties of Shape  
Hi Year 6. It's Tuesday 2<sup>nd</sup> June 2020

## Part 1 - Fluency

**WALT: Understand Angles**  
*See my green notes to help  
you.*

## Introduction

You are a robot who has been programmed to draw shapes.  
Follow the directions to draw a shape.

**[start at point A]**

**Move straight ahead 5 centimetres.**

**[turn 45 degrees clockwise]**

**Move straight ahead 5 centimetres.**

**[turn 90 degrees clockwise]**

**Move straight ahead 5 centimetres.**

**[move 45 degrees clockwise]**

**Move straight ahead 5 centimetres.**

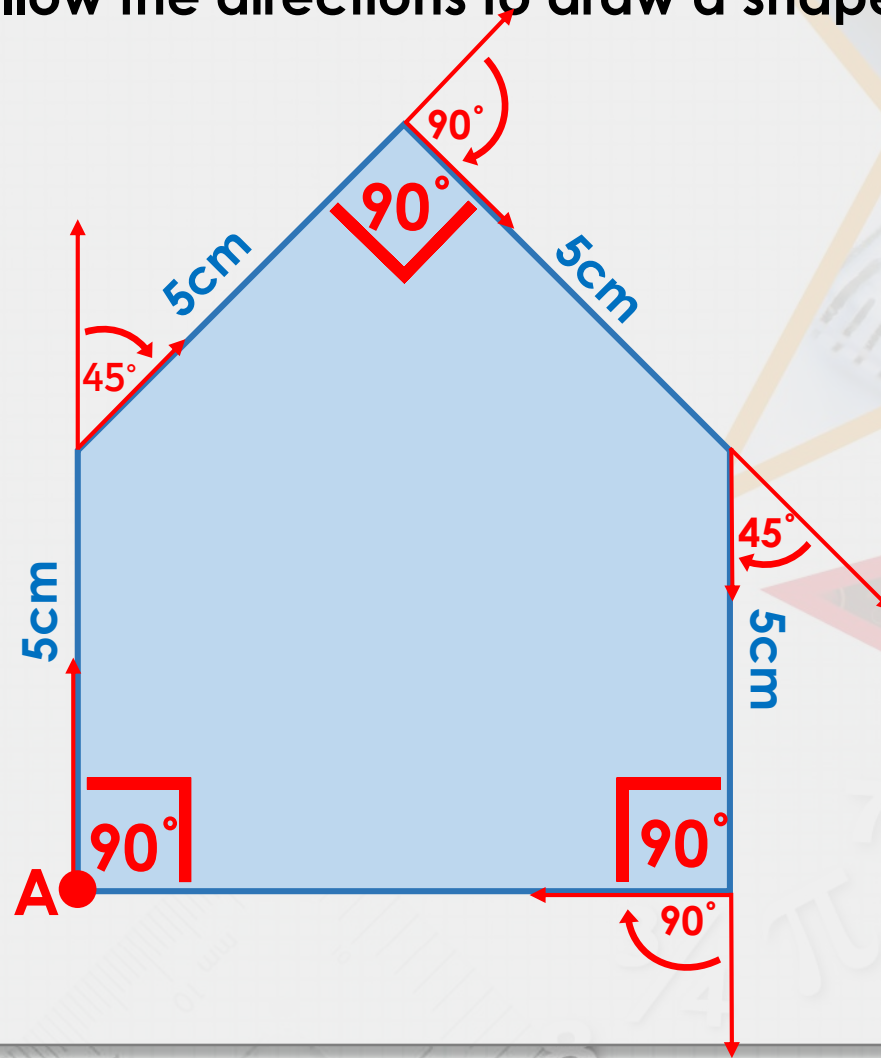
**[move 90 degrees clockwise]**

**Move straight ahead to end at Point A.**

**[end at point A]**

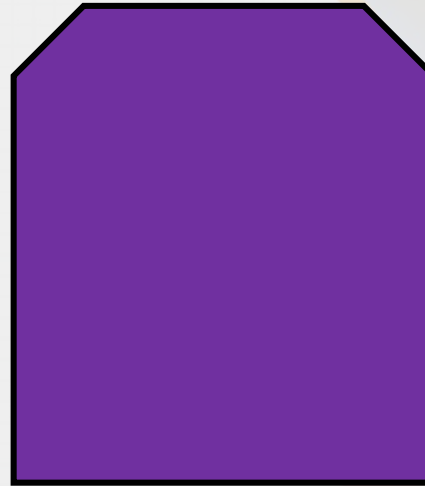
## Introduction

You are a robot who has been programmed to draw shapes.  
Follow the directions to draw a shape.



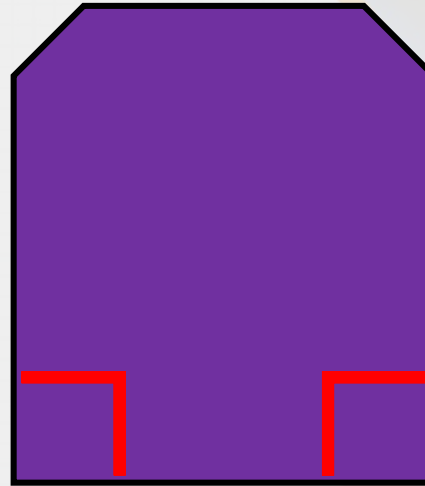
## Varied Fluency 1

How many right angles are in these shapes?



Varied Fluency 1

How many right angles are in these shapes?



3

## Varied Fluency 2

Complete this table.

Angle	Degrees	Amount of Turn
Right angle	$90^\circ$	Quarter turn
Straight line (two right angles)		Half turn
	$270^\circ$	Three-quarter turn

## Varied Fluency 2

Complete this table.

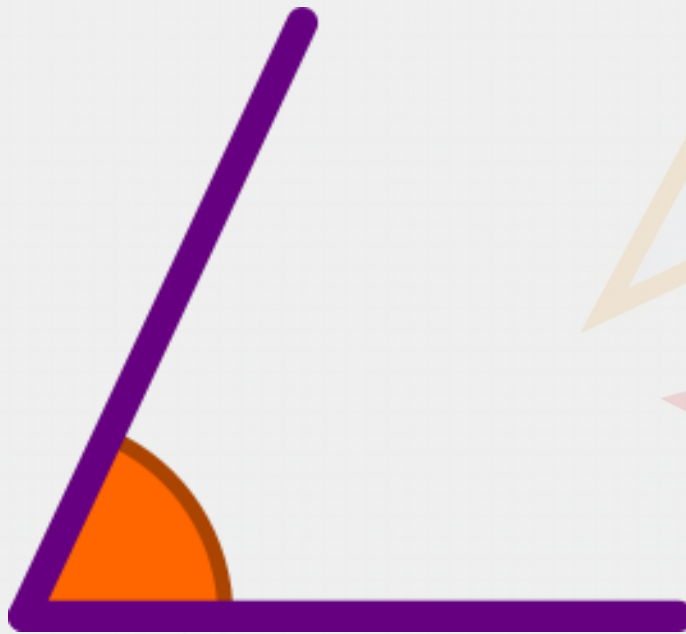
Angle	Degrees	Amount of Turn
Right angle	$90^\circ$	Quarter turn
Straight line (two right angles)	$180^\circ$	Half turn
Three right angles	$270^\circ$	Three-quarter turn



Varied Fluency 3

True or false?

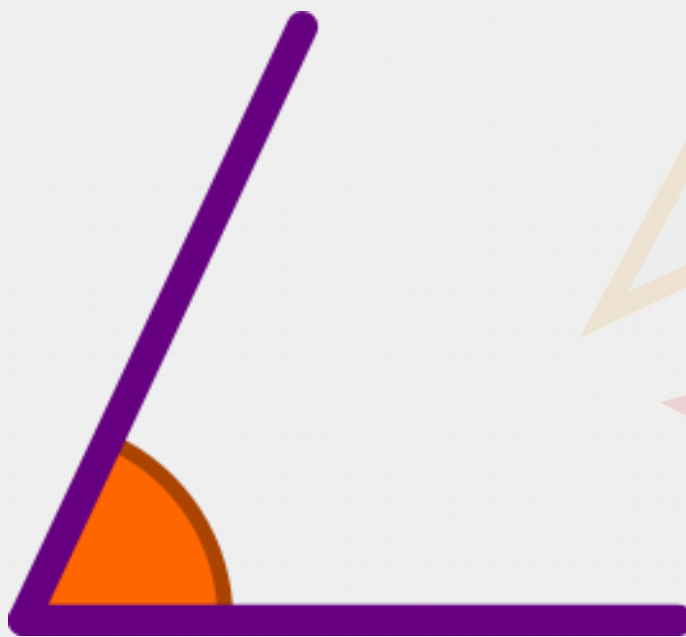
This angle is approximately  $140^\circ$ .



Varied Fluency 3

True or false?

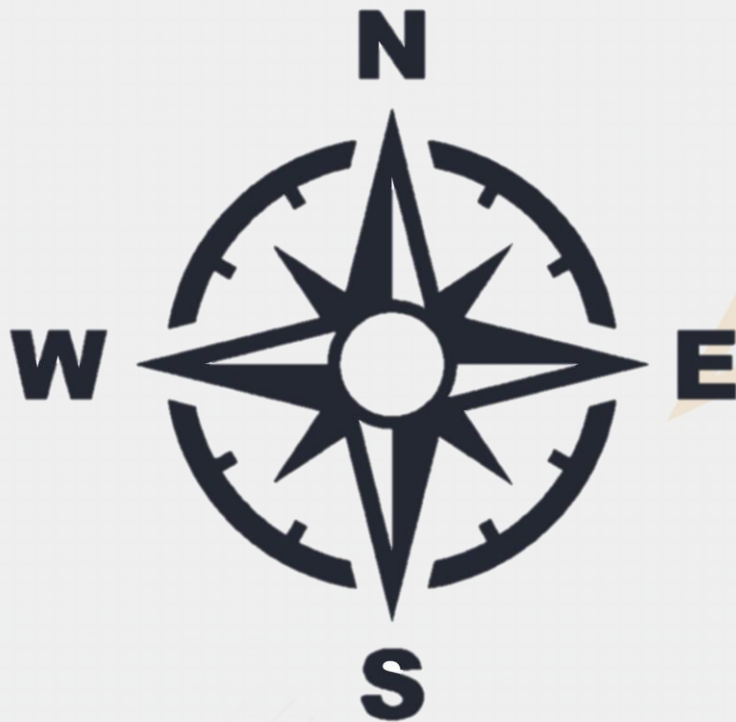
This angle is approximately  $140^\circ$ .



**False.** It is approximately  $65^\circ$ . You know it is an acute angle without measuring because it is less than  $90^\circ$ .

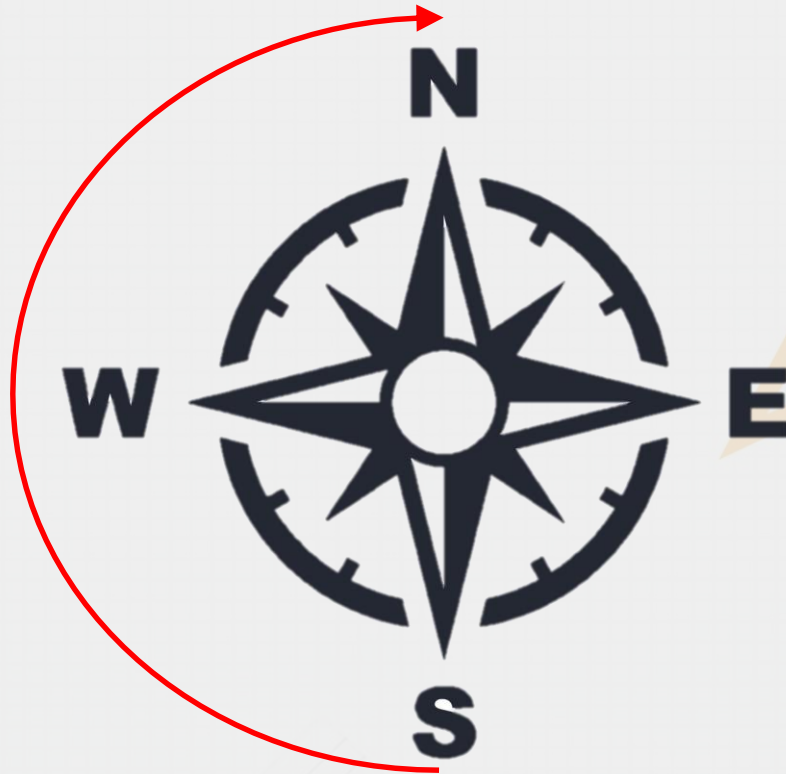
## Varied Fluency 4

If you are standing facing south and turn  $180^\circ$  clockwise, which direction will you be facing?



## Varied Fluency 4

If you are standing facing south and turn  $180^\circ$  clockwise, which direction will you be facing?



**North**

# Well done! It's over to you now.

Go to Part 2 and choose your challenge! Normal rules apply: page 1 will give you an easier challenge, page 2 will be about the same as what we've just practised and page 3 will be more of a stretch.

You only need to do the first set of questions on your chosen challenge – the 'A' questions. If you want extra practice, you can then do the 'B' questions of your chosen challenge page. When you finish, don't forget to mark your answers before sharing, so I can see where you need help.