

Homework

Measuring with a Protractor 2

Teaching note:

Children will need a protractor to complete this Homework task.

National Curriculum Objectives:

Mathematics Year 5: (5G4a) Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles

Mathematics Year 5: (5G4c) Draw given angles and measure them in degrees

Differentiation:

Questions 1, 4 and 7 (Varied Fluency)

Developing Match the angles to the number of degrees using increments of 10° . All angles presented on a horizontal line.

Expected Match the angles to the number of degrees using increments of 5° . Not all angles presented on a horizontal line.

Greater Depth Match the angles to the number of degrees using increments of 1° . Not all angles presented on a horizontal line. Protractor not always placed at zero.

Questions 2, 5 and 8 (Varied Fluency)

Developing Measure the obtuse angle in a shape using increments of 10° . All angles presented on a horizontal line.

Expected Measure the angles in a shape using increments of 5° . Not all angles presented on a horizontal line.

Greater Depth Measure the angles in a shape using increments of 1° . Not all angles presented on a horizontal line. Protractor not always placed at zero.

Questions 3, 6 and 9 (Reasoning and Problem Solving)

Developing Find the angles that are not obtuse and unscramble the letters to make a word using angles with increments of 10° . All angles presented on a horizontal line.

Expected Find the angles that are not obtuse and unscramble the letters to make a word using angles with increments of 5° . Not all angles presented on a horizontal line.

Greater Depth Find the angles that are not obtuse and unscramble the letters to make a word using angles with increments of 1° . Not all angles presented on a horizontal line. Protractor not always placed at zero.

Measuring with a Protractor 2

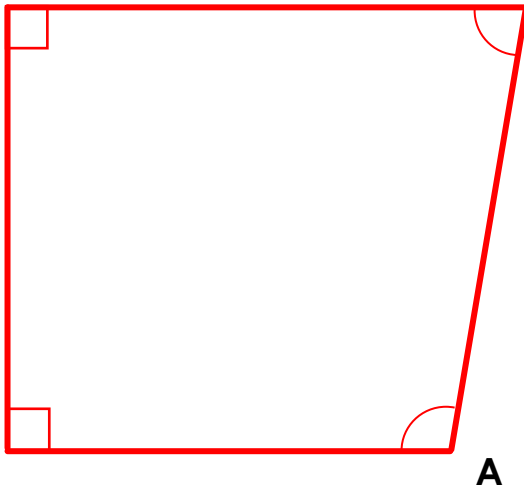
1. Match the degrees with their angles.

Diagram showing four angles labeled A, B, and C. Angle A is an acute angle, angle B is an obtuse angle, and angle C is an obtuse angle. Three degree values are provided in boxes: 110° , 170° , and 130° .



VF
HW/Ext

2. Measure the obtuse angle in the shape below.



A = _____ °



VF
HW/Ext

3. Measure the angles that are obtuse then order them from smallest to largest to spell out a hidden word.

Diagram showing six angles labeled D, U, O, K, P, and C. Each angle is shown with a red box below it. Angles D, U, and O are acute, while K, P, and C are obtuse.



RPS
HW/Ext

Measuring with a Protractor 2

4. Match the degrees with their angles.

95°

A

C

140°

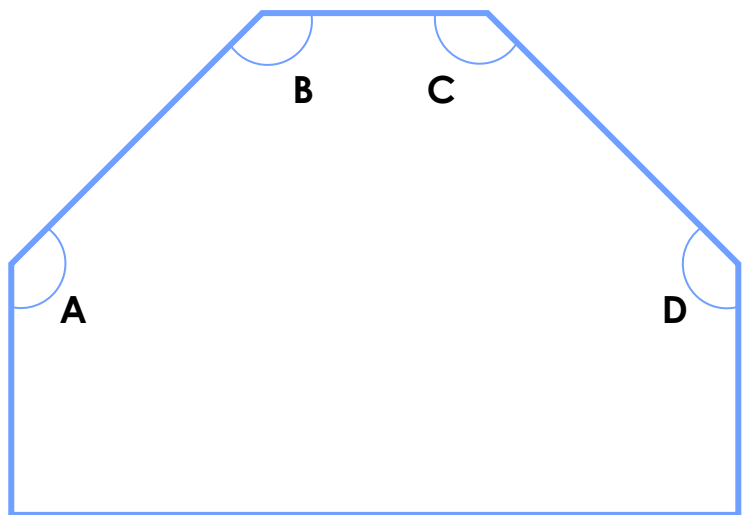
B

165°



VF
HW/Ext

5. Measure the obtuse angles in the shape below.



A = _____ °

B = _____ °

C = _____ °

D = _____ °



VF
HW/Ext

6. Measure the angles that are obtuse then order them from smallest to largest to spell out a hidden word.

J

M

A

P

G

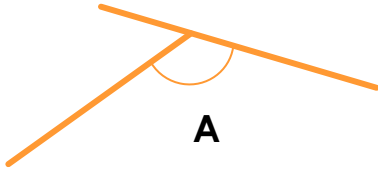
U



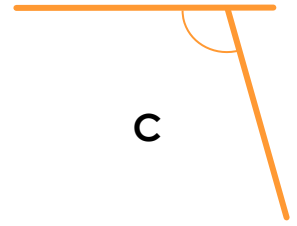
RPS
HW/Ext

Measuring with a Protractor 2

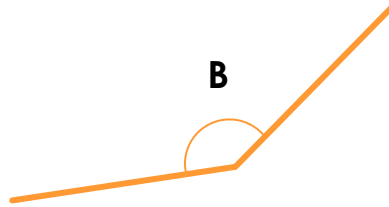
7. Match the degrees with their angles.



106°



128°

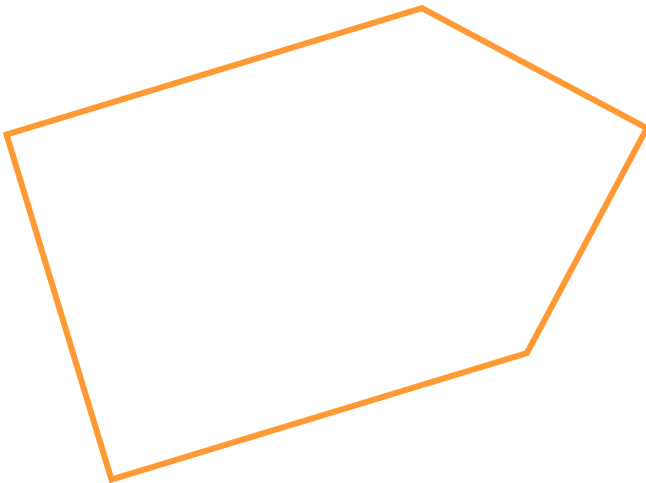


143°



VF
HW/Ext

8. Measure the obtuse angles in the shape and label them A and B.



A = _____ °

B = _____ °



VF
HW/Ext

9. Measure the angles that are obtuse then order them from smallest to largest to spell out a hidden word.

E	A	D	V	I	S



RPS
HW/Ext

Homework

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Developing

1. $A = 130^\circ$, $B = 170^\circ$, $C = 110^\circ$
2. $A = 100^\circ$
3. The word is DUCK

Expected

4. $A = 140^\circ$, $B = 165^\circ$, $C = 95^\circ$
5. A, B, C and $D = 135^\circ$
6. The word is JUMP

Greater Depth

7. $A = 128^\circ$, $B = 143^\circ$, $C = 106^\circ$
8. $A, B = 136^\circ$
9. The word is DIVE