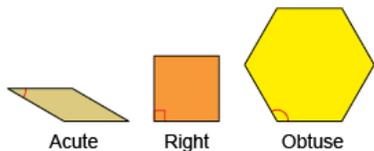


Activity 6 Assessment

2-D Shapes and Angles Consolidation

Measuring and Constructing Angles

Identifies and compares different types of angles using the benchmark of 90° .



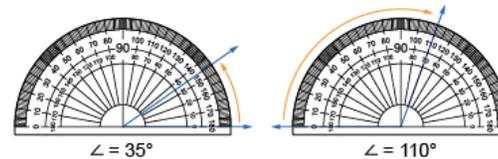
"This is an acute angle because it is less than 90° . This is an obtuse angle because it is greater than 90° ."

Compares and measures angles using appropriate non-standard units.



"The acute angle in the trapezoid equals 2 acute angles in the tan parallelogram, or 60° ; the obtuse angle equals 4 of the acute angles, or 120° ."

Compares and measures angles using a protractor.



"I can use the protractor to compare and measure angles. The two scales on the protractor make it easier to measure acute and obtuse angles."

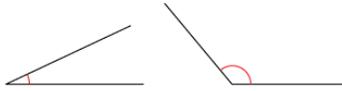
Observations/Documentation

Activity 6 Assessment

2-D Shapes and Angles Consolidation

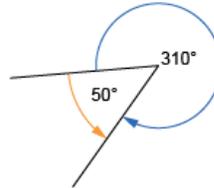
Measuring and Constructing Angles (cont'd)

Flexibly estimates, compares and measures angles using standard units and benchmarks.



"The first angle is about halfway between 0° and 45° , so it is about 25° . The second angle is less than halfway between 90° and 180° , so it's about 130° ."

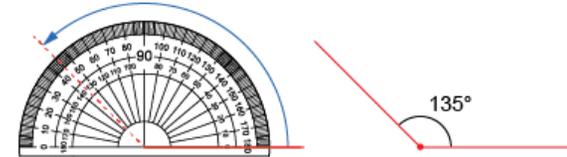
Measures angles using a 360° protractor and states the relationships between angles.



"I measured the angle clockwise and got 310° . I measured it counterclockwise and got 50° . The sum of the angles is 360° because they form a complete circle."

Flexibly estimates, compares, measures, and constructs angles using various tools.

Draw a 135° angle.



"I drew a horizontal line, aligned the protractor, then followed the outer scale around to 135° and made a mark. I joined the mark to the end of the line."

Observations/Documentation

Activity 6 Assessment

2-D Shapes and Angles Consolidation

Properties of Triangles

Recognizes various triangles by the number of equal sides.



"I know the first is scalene, the second is isosceles, and the third is equilateral by looking at the number of equal sides."

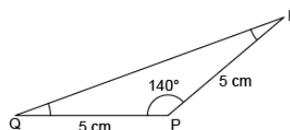
Understands that triangles can be classified by side lengths and/or angle measures.



"The first triangle is an acute isosceles triangle because it has 2 equal sides and all acute angles. The second triangle is an obtuse scalene triangle because it has no equal sides and an obtuse angle."

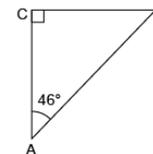
Constructs and identifies triangles given some side and angle measures.

ΔPQR , with $PR = 5$ cm,
 $PQ = 5$ cm,
 $\angle P = 140^\circ$



"I drew $PQ = 5$ cm and used a protractor to make a 140° angle at P. I drew $PR = 5$ cm, then connected R to Q to make the third side. Angles Q and R are each 20° because the interior angles must add to 180° . This is an obtuse isosceles triangle."

Uses various geometric properties to determine unknown side and angle measures.



"This is an isosceles right triangle. $\angle B = 90^\circ - 46^\circ$ so $\angle B = 44^\circ$. The interior angles must add to 180° . I know that side AC and CB are the same."

Observations/Documentation