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Module 8 Points, Lines, Angles, and Triangles Lesson 4 Triangles

## Set 1

(1)
The tip of an arrowhead is roughly the shape of a triangle. For the triangle shown, name the triangle's sides, vertices, and angles. Write one name for the triangle.


Sides: $\overline{L M}, \overline{M N}, \overline{N L}$
Vertices: $L, M, N$
Angles: $\angle L, \angle M, \angle N$
Name: $\triangle L M N$
(2) Part of the front of a home is in the shape of a triangle. Name the triangle's sides, vertices, and angles. Write one name for the triangle.


Sides: $\overline{M R}, \overline{R Q}, \overline{Q M}$
Vertices: $R, M, Q$
Angles: $\angle R, \angle M, \angle Q$
Name: $\triangle R M Q$

## Set 2

(1) The triangle shows the path Eddie ran the first time he played Earth baseball. Classify the triangular path by its sides and by its angles.


## Right isosceles

Classify each triangle by its sides and by its angles.


Acute isosceles


Obtuse scalene


Right scalene

## Set 3

(1) A flag is folded so that it fits in a triangular box. One angle of the box measures $88^{\circ}$. Another measures $46^{\circ}$. What is the value of $x$, the measure of the box's third angle?


$$
\begin{aligned}
46^{\circ}+88^{\circ}+x^{\circ} & =180^{\circ} \\
134^{\circ}+x^{\circ} & =180^{\circ} \\
x & =46^{\circ}
\end{aligned}
$$

The measure of the box's third angle is $46^{\circ}$.

A playground slide forms a $29^{\circ}$ angle with the ground. What angle does the slide form with the vertical wall?


$$
\begin{aligned}
90^{\circ}+29^{\circ}+x & =180^{\circ} \\
119^{\circ}+x & =180^{\circ} \\
x & =61^{\circ}
\end{aligned}
$$

The slide forms a $61^{\circ}$ angle with the vertical wall.

