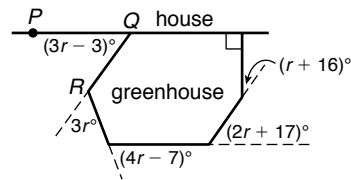


LESSON
6-1

Problem Solving
Properties and Attributes of Polygons

1. A campground site is in the shape of a convex quadrilateral. Three sides of the campground form two right angles. The third interior angle measures 10° less than the fourth angle. Find the measure of each interior angle.

2. A pentagon has two exterior angles that measure $(3x)^\circ$, two exterior angles that measure $(2x + 22)^\circ$, and an exterior angle that measures $(x + 41)^\circ$. If all of these angles have different vertices, what are the measures of the exterior angles of the pentagon?



3. The top view of a hexagonal greenhouse is shown at the right. What is the measure of $\angle PQR$, the acute angle formed by the house and the greenhouse?

Choose the best answer.

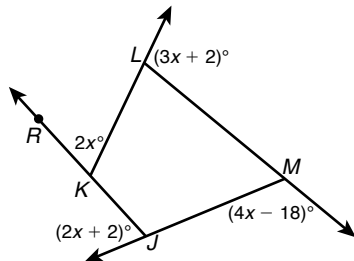
4. A figure is an equiangular 18-gon. What is the measure of each exterior angle of the polygon?

- A** 10°
B 18°
C 20°
D 36°

5. Three interior angles of a convex heptagon measure 125° , and two of the interior angles measure 143° . Which are possible measures for the other two interior angles of the heptagon?

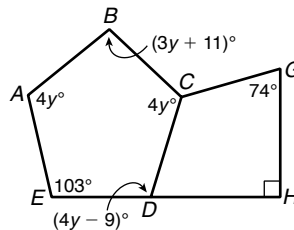
- F** 48° and 48° **H** 100° and 116°
G 39° and 100° **J** 89° and 150°

6. Find the measure of $\angle RKL$.



- A** 34° **C** 86°
B 68° **D** 148°

7. What is the measure of $\angle GCD$?



- F** 123° **H** 73°
G 116° **J** 29°