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1. In baseball the home plate is

shaped like the one shown.

It has 3 right angles and 2

other congruent angles (A and

B). Find m<A and m<B.

1. As the number of sides of a regular polygon increases, what happens to:
   1. the sum of the interior angles?
   2. the measure of one central angle?
   3. the measure of each interior angle?
2. Can a polygon be equiangular but not equilateral? Give an example.
3. Can a polygon be equilateral but not equiangular? Give an example.
4. Each interior angle of a regular polygon measures 172 o. How many sides does the polygon have?
5. The four interior angles of a quadrilateral measure x-5, 3(x+8), 3x+6, and 5x-1. Find the measures of the four angles.
6. Is the sum of the interior angles of a convex polygon the same as a nonconvex polygon? Explain or show an example to justify your answer.



1. Activity: A floor company advertises that it can cover a kitchen floor with regular polygon shaped tiles—in fact, any shape you want they will do. Is the company advertising correctly? Which regular polygons could actually fit around a point leaving no gaps?