

1.6 Deductive Reasoning

- Inductive
- see patterns
 - make a statement conjecture

If the pen is red
then it will write red

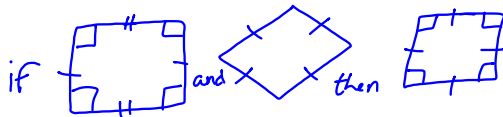
If I multiply by 5
the product will end in 0 or 5
deals with rules
accepted properties

If a number ends in 0 or 5
then it is a multiple of 5

If I make the Bus I get
to work on time
I made the Bus
I got to work on time

Converse

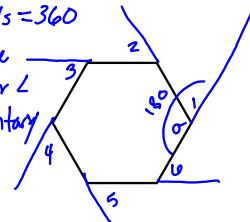
If $x^2 = 9$ then $x = 3$
If $x = -3$ then $x^2 = 9$



Exterior Angles
- The angles formed when
a side of a polygon is extended

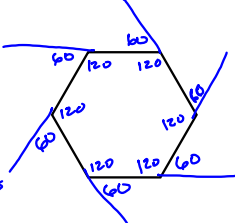
Sum of exterior \angle 's = 360

Exterior \angle measure
based on interior \angle
and be supplementary



Total \angle measure
 $180(n-2)$
hexagon 720°

Regular polygons
have = angles

$$\frac{180(n-2)}{n} = \frac{720}{6} = 120$$


The diagram shows a regular hexagon with interior angles labeled 120 and exterior angles labeled 60. Blue lines extend from each vertex to form the exterior angles. The interior angles are labeled 120 at each of the six vertices. The exterior angles are labeled 60 at each of the six vertices. The labels are written in blue ink.