## Chapter 6



## POLYGON SUM FORMULA

The sum of all the angles in an $n$-gon (any polygon) is $\qquad$

## EQUIANGULAR POLYGON FORMULA

The measure of one angle in any equiangular polygon can be found with the expression:


# POLYGON EXTERIOR ANGLE THEOREM 

The sum of the exterior angles in any polygon is $\qquad$ degrees

## Review

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A quadrilateral with exactly 2 pairs of distinct congruent consecutive sides

Non－vertex
Angles


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## KITE DIAGONALS THEOREM

Diagonals of a kite are

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## KITE DIAGONAL BISECTOR THEOREM

The diagonal connecting the vertex angles the non－vertex angle diagonal

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## KITE ANGLES THEOREM

Non－vertex angles of a kite are

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## KITE ANGLE BISECTOR THEOREM

 The vertex angles of a kite are by the $\qquad$
## Review



A quadrilateral with exactly one pair of parallel sides


## Review


A quadrilateral with exactly one pair of parallel sides


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## TRAPEZOID CONSECUTIVE ANGLE <br> THEOREM <br> Consecutive angles between bases are

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ISOSCELES TRAPEZOID THEOREM
Base angles in an isosceles trapezoid are

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## ISOSCELES TRAPEZOID DIAGONAL

## THEOREM

Diagonals in an isosceles trapezoid are
$\qquad$

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## TRAPEZOID MIDSEGMENT THEOREM The midsegment of a trapezoid is to the bases and its length is the of the two bases．

## What is a Parallelogram?

> Opposite sides are parallel
> Opposite sides are congruent
> Opposite angles are equal
> Consecutive angles supplementary
> Diagonals bisect eachother

## What is a Rectangle?

> Rectangles are special parallelograms

- Has all the properties of a parallelogram
> All angles are congruent
- Each angle is $90^{\circ}$


## What is a Rhombus?

> Rectangles are special parallelograms

- Has all the properties of a parallelogram
> Has four congruent sides
> Sometimes called a diamond


## What is a Square?

> Squares are special parallelograms

- Has all the properties of a parallelogram
$>$ A square is a kind of rectangle
- Each angle is $90^{\circ}$
> A square is also a special rhombus
- All sides are congruent


## What is a Square?

$>$ A square is an equilateral rectangle
$>$ A square is an equiangular rhombus
> A regular quadrilateral

