**Study the following.**

quadrilateral (kwahd-ruh-**lat**-ur-uhl) – a polygon with four sides.

square (**skwair**) – a polygon with all four sides the same length, and four right angles

rectangle (**rek**-tang-guhl) – a polygon with four right angles . Also, each pair of opposite sides will be the same length.

rhombus (**rom**-buhss) – a polygon with all four sides the same length

trapezoid (**trap**-uh-zoid) – a 4 sided polygon with one pair of opposite sides parallel.

parallelogram (pa-ruh-**lel**-uh-gram) – a 4 sided polygon with two pairs of opposite sides parallel. Also each pair of opposite sides will be the same length.

**Say each word out loud and write it in the blank.**

quadrilateral_____
square_____
rectangle_____
rhombus_____
trapezoid_____
parallelogram_____

**Write each definition in your own words.**

quadrilateral

square

rectangle

rhombus

trapezoid

parallelogram

**Write one sentence using each word.**

quadrilateral
1.

square
1.

rectangle
1.

rhombus
1.

trapezoid
1.

parallelogram
1.


**Matching.**

quadrilateral                          a polygon with four right angles

square                                 a 4 sided polygon with one pair of
                                       opposite sides parallel
rectangle
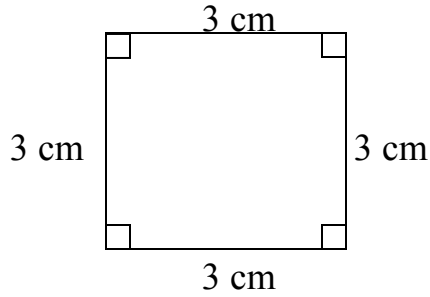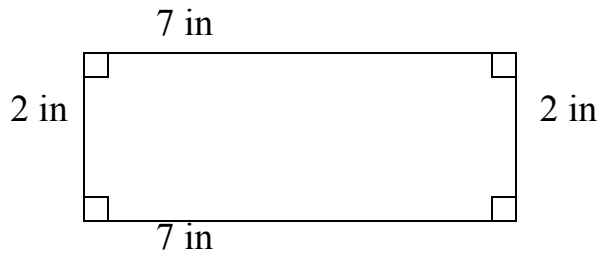                                       a polygon with all four sides the same
rhombus                                length, and four right angles

trapezoid                              a 4 sided polygon with two pairs of
                                       opposite sides parallel
parallelogram
                                       a polygon with all four sides the same
a polygon with four sides              length

## Study these examples.

quadrilateral

6in   4in

2in

8in

square

3 cm

3 cm        3 cm

3 cm

rectangle

7 in

2 in        2 in

7 in

rhombus

6ft

6ft        6ft

6ft

trapezoid

parallel

parallelogram

10cm

parallel        4cm        4cm
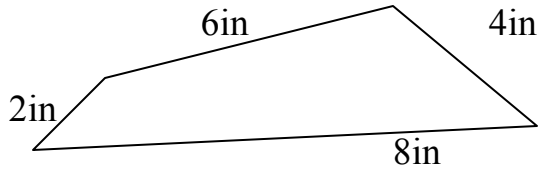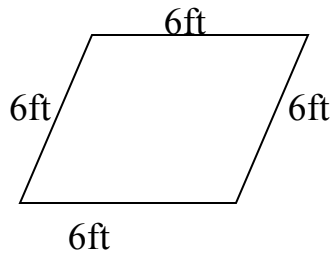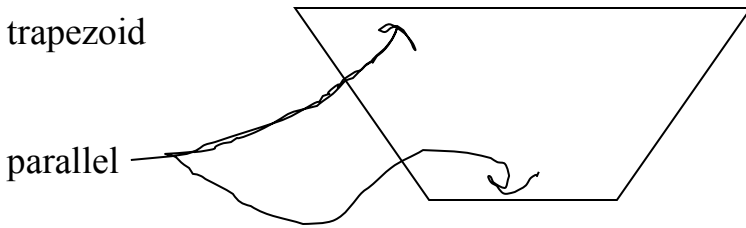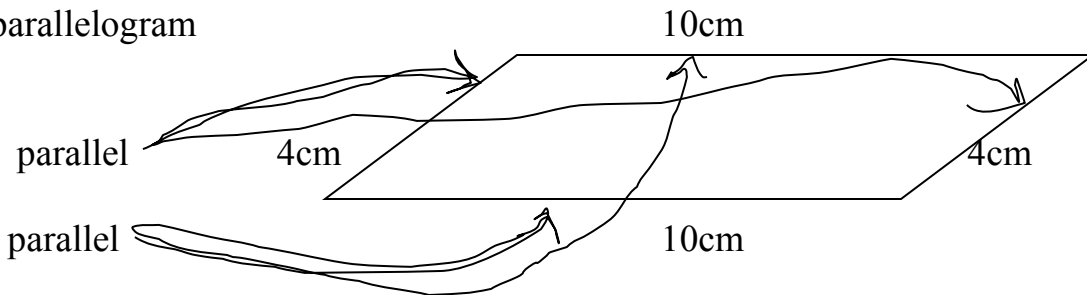
parallel        10cm

**Draw and label two examples of each.**

quadrilateral

square

rectangle

rhombus

trapezoid

parallelogram

**Study the following.**

Some of the four-sided shapes can be called more than one thing.

Use the following diagram to see all the names certain shapes can be called.

Quadrilaterals

Trapezoid          Parallelograms

Rectangle          rhombus
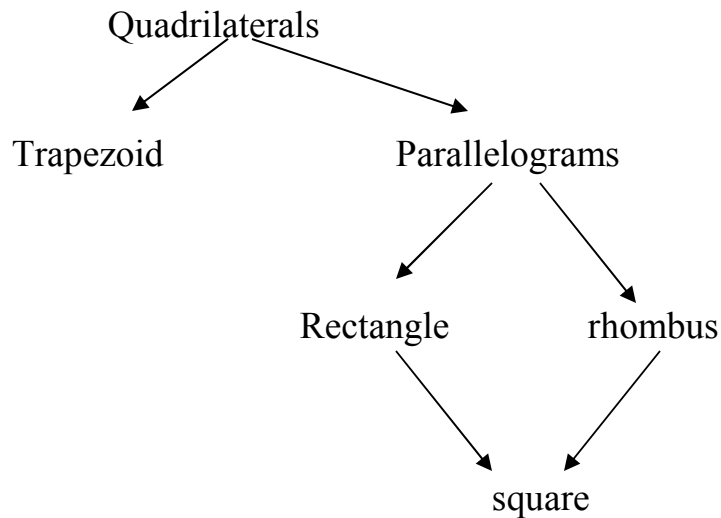
square

The diagram shows a square is also a rhombus, rectangle, parallelogram, and quadrilateral.

A rectangle is also a parallelogram and a quadrilateral.

A rhombus is also a parallelogram and a quadrilateral.

A trapezoid is also a quadrilateral.

A parallelogram is also a quadrilateral.

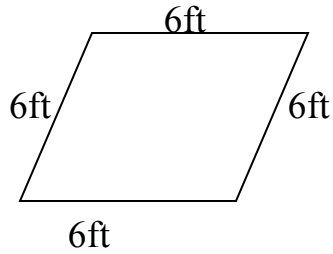**Name each figure in as many ways as you can.**

1._____
_____

6in    4in

2in

8in

2._____
_____

3 cm

3 cm        3 cm

3 cm

3._____
_____

7 in

2 in        2 in

7 in

4._____
_____

6ft

6ft        6ft

6ft

5._____
_____

parallel

6._____
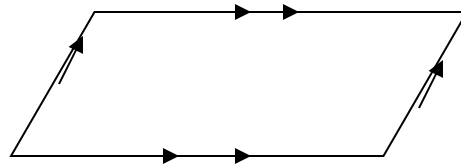_____
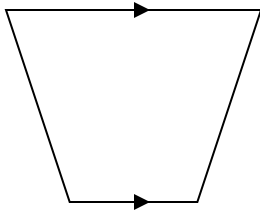
10cm
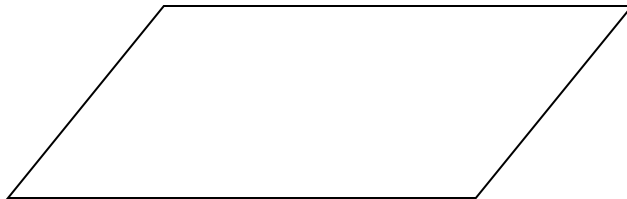
parallel    4cm        4cm

parallel        10cm
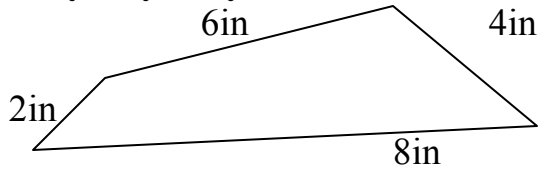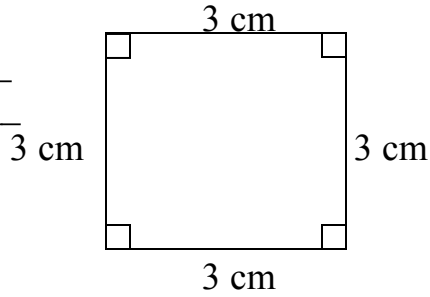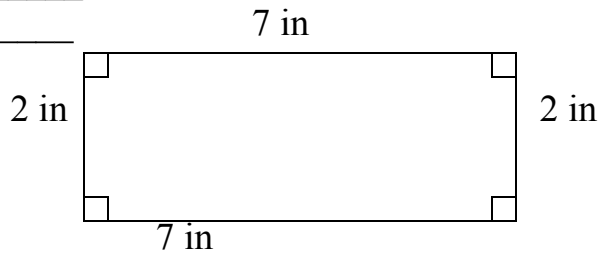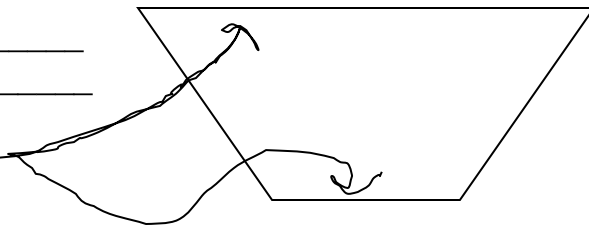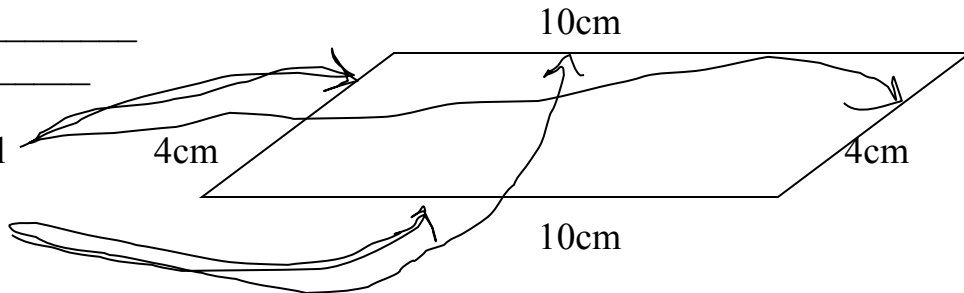
## Study the following.

A set of single arrowheads or a set of double arrowheads shows which pairs of lines are parallel.
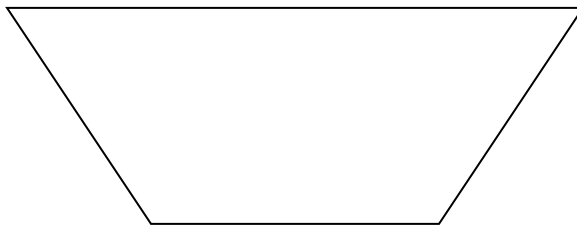
Examples:

## Label this parallelogram with arrowheads.
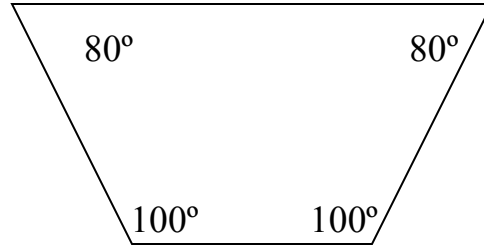
## Label this trapezoid with arrowheads.

**Study the following.**

There are a total of 360 degrees in a quadrilateral.

Example:

$80º + 100º + 80º + 100º = 360º$

80º          80º

100º        100º

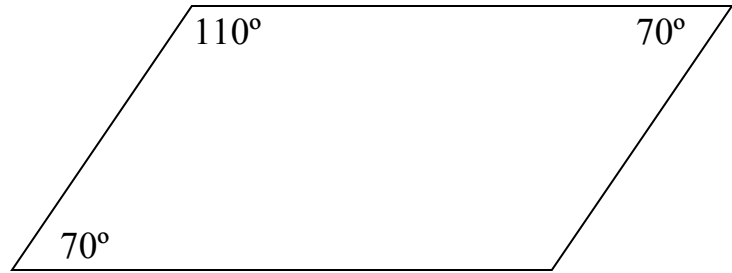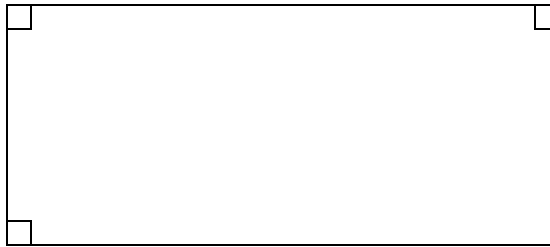**Draw three examples of quadrilaterals with the total degrees adding up to 360.**

1.

2.

3.

**Fill in the degrees for the missing angle.**
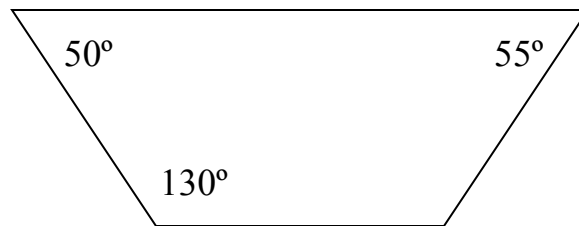**(Add up the three angles, and subtract from 360.)**

1. _____

110º   70º

70º

2. _____

3. _____

50º   55º

130º

4. _____

110º   125º

45º