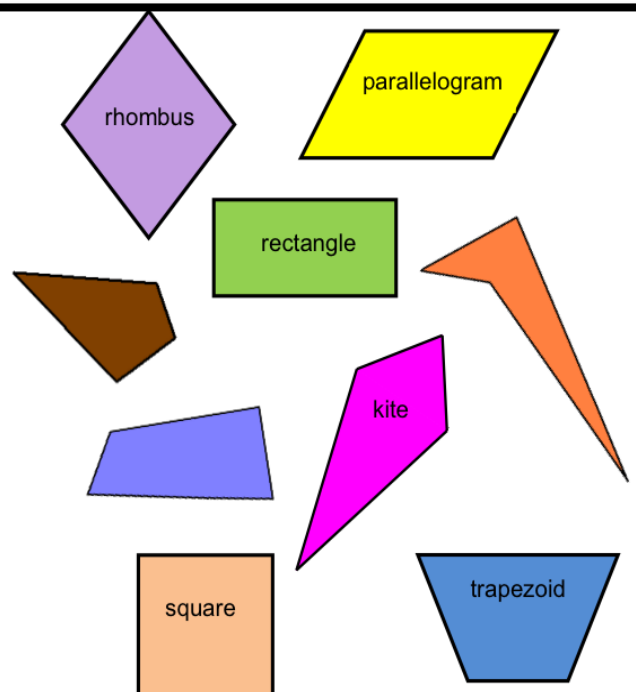
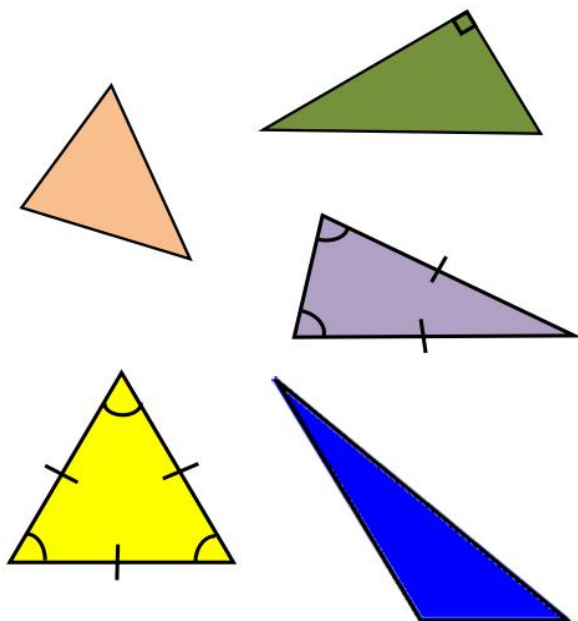
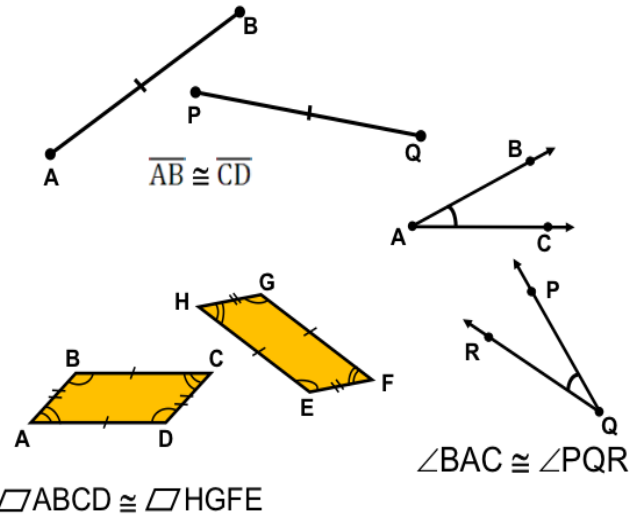


center of dilation = C  
scale factor = 1/3

have exactly the  
same shape and size

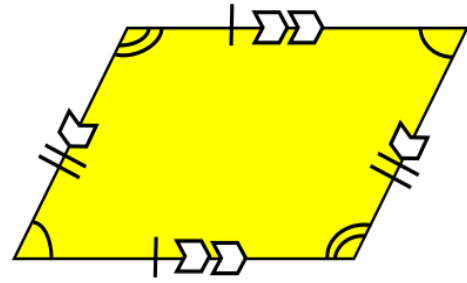
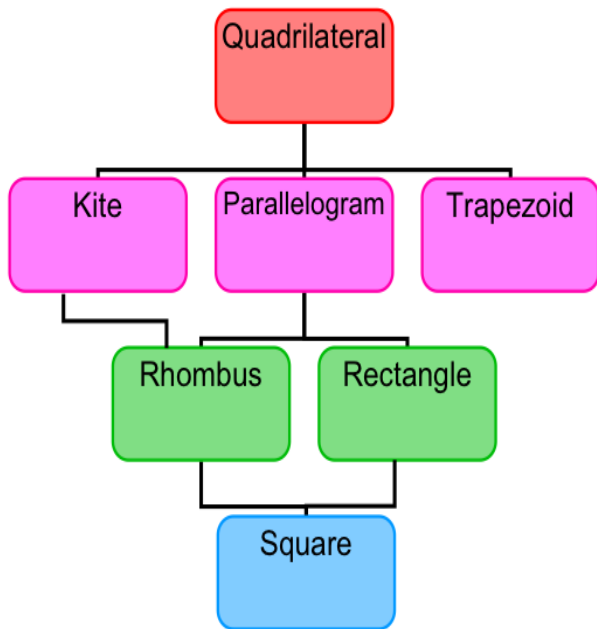


**Congruent  
Figures**

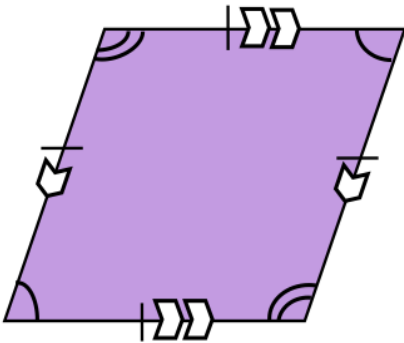
**Dilation**

**Quadrilaterals**

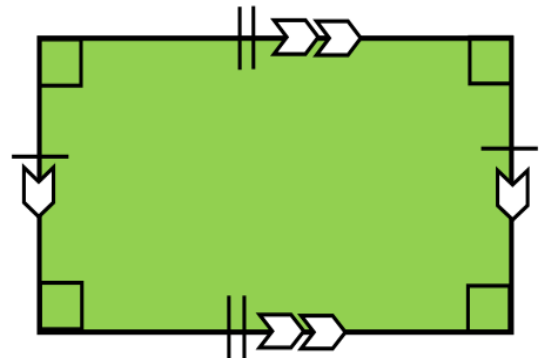
**Triangles**



- opposite angles are congruent
- 2 pairs of parallel sides
- 2 pairs of opposite sides congruent



- opposite angles are congruent
- 2 pairs of parallel sides
- 4 congruent sides



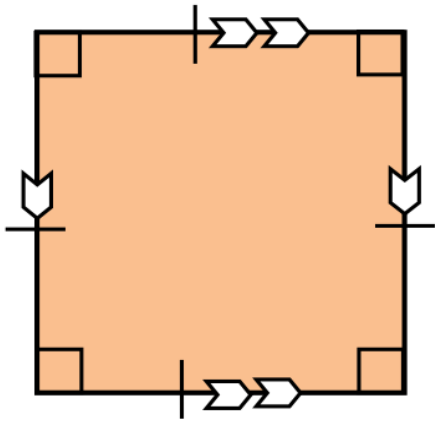
- 4 right angles
- 2 pairs of parallel sides
- 2 pairs of opposite sides congruent

**Parallelogram**

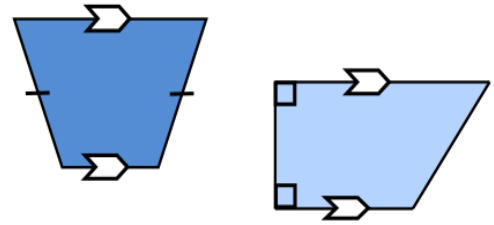
**Quadrilateral  
Relationships**

**Rectangle**

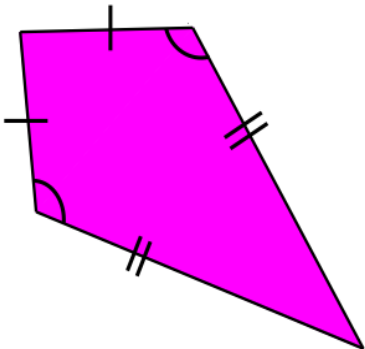
**Rhombus**



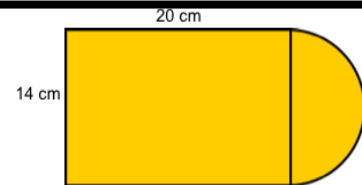
- 4 right angles
- 2 pairs of parallel sides
- 4 congruent sides



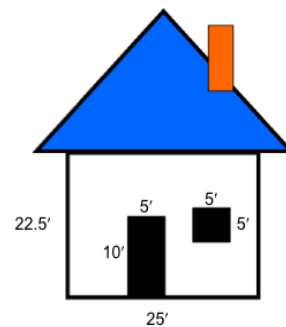
- may have zero or two right angles
- exactly one pair of parallel sides
- may have one pair of congruent sides



- one pair of opposite congruent angles
- 2 pairs of adjacent congruent sides



Subdivide into other figures then determine the perimeter.



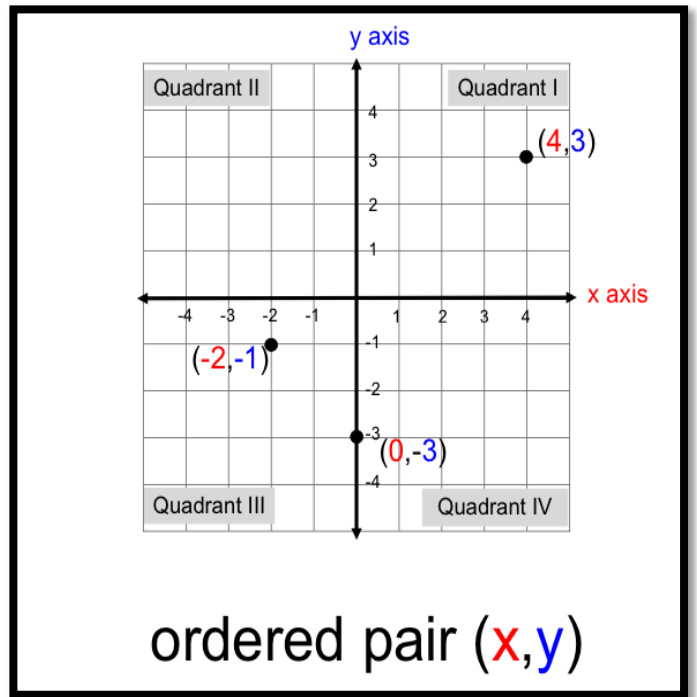
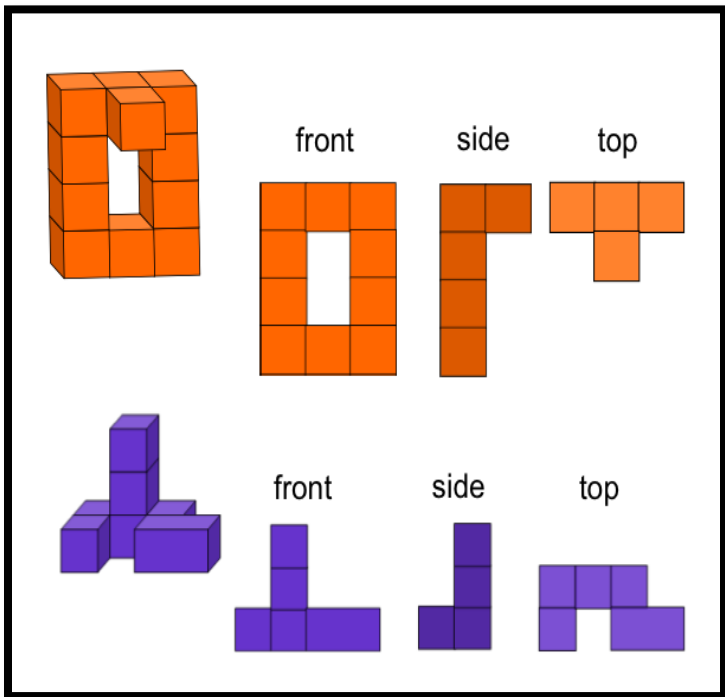
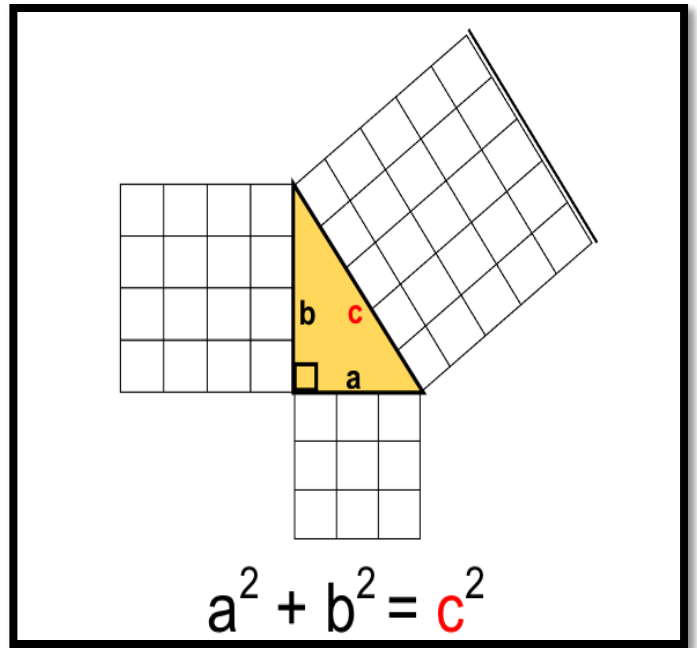
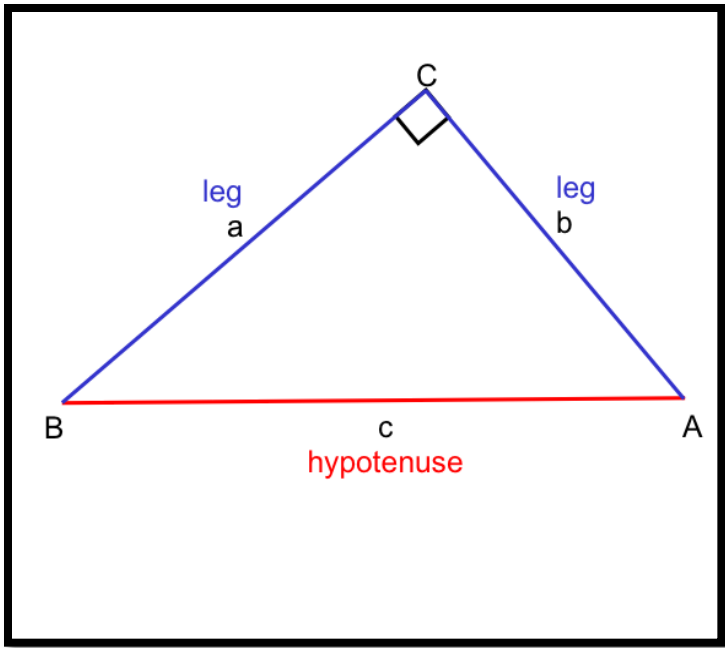
Subdivide into other figures then determine the area.

**Trapezoid**

**Square**

**Composite  
Figure**

**Kite**



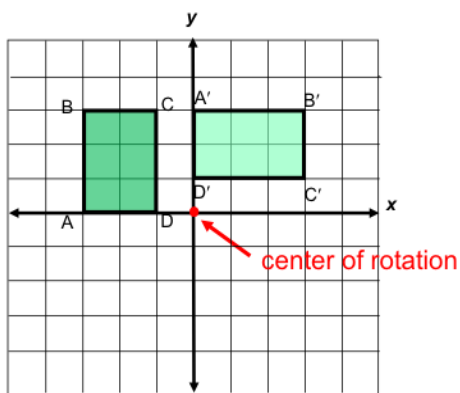
**Pythagorean  
Theorem**

**Right Triangle**

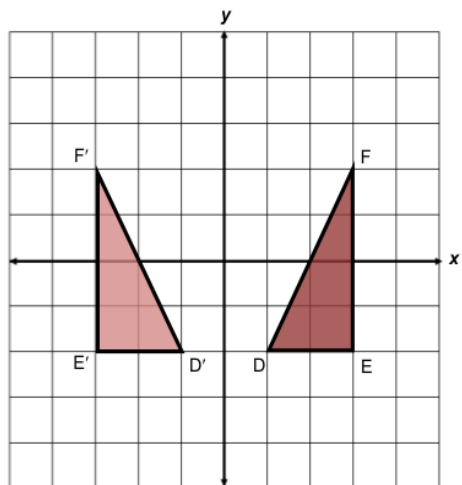
**Coordinate  
Plane**

**Three  
Dimensional  
Models**

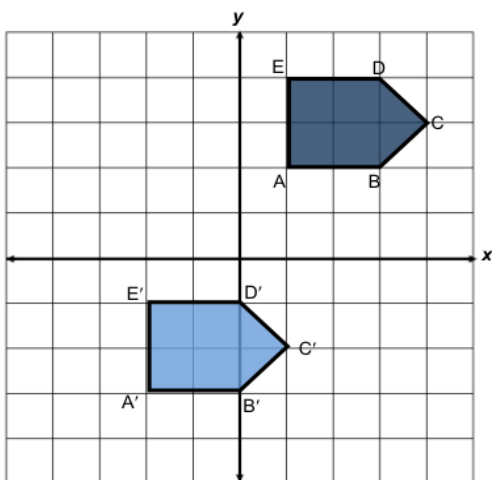




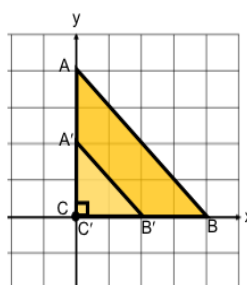
Preimage	Image
A(-3,0)	A'(0,3)
B(-3,3)	B'(3,3)
C(-1,3)	C'(3,1)
D(-1,0)	D'(0,1)



Preimage	Image
D(1,-2)	D'(-1,-2)
E(3,-2)	E'(-3,-2)
F(3,2)	F'(-3,2)



Preimage	Image
A(1,2)	A'(-2,-3)
B(3,2)	B'(0,-3)
C(4,3)	C'(1,-2)
D(3,4)	D'(0,-1)
E(1,4)	E'(-2,-1)

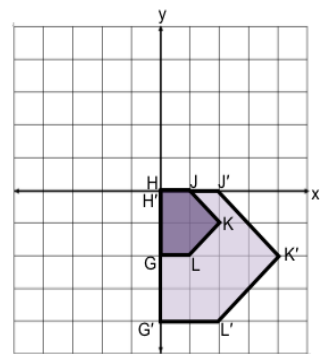


center of dilation = (0,0)  
scale factor =  $\frac{1}{2}$

Preimage	Image
A(0,4)	A'(0,2)
B(4,0)	B'(2,0)
C(0,0)	C'(0,0)

center of dilation = (0,0)  
scale factor = 2

Preimage	Image
G(0,-2)	G'(0,-4)
H(0,0)	H'(0,0)
J(1,0)	J'(2,0)
K(2,-1)	K'(4,-2)
L(1,-2)	L'(2,-4)

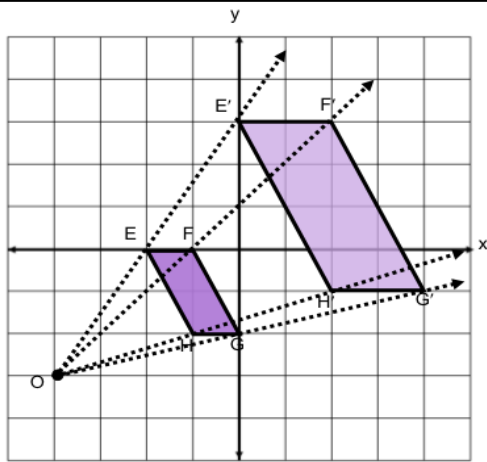


# Reflection

# Rotation

# Dilation

# Translation



center of dilation =  $(-4, -3)$   
scale factor = 2

Preimage	Image
E(-2,0)	E'(0,3)
F(-1,0)	F'(2,3)
G(0, -2)	G'(4,-1)
H(-1,-2)	H'(2,-1)

# Dilation