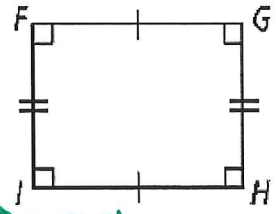
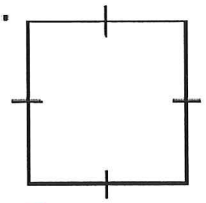
Name: Key Hour: _____

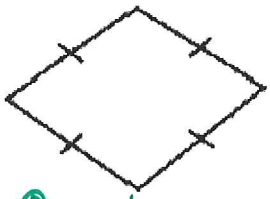
Quadrilaterals and Special Parallelograms HW

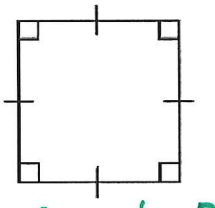
Classifying: Classify all that apply (quadrilateral, parallelogram, rhombus, rectangle, square)

1. 

Quad Para Rectangle

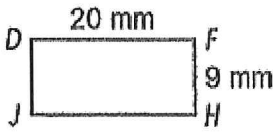
2. 
Quad para Rhombus

3. 
Quad para Rhombus

4. 
Quad Rhombus Square Para Rectangle

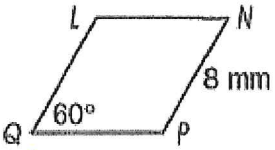
Practice

$\square DFHJ$ is a rectangle. Find the length of each side and the measure of each angle.



1. $\overline{JH}$ = 20 mm Op. sides are ≅
2. $\overline{DJ}$ 9 mm op. sides are ≅
3. $\angle H = 90°$ def of a Rectangle

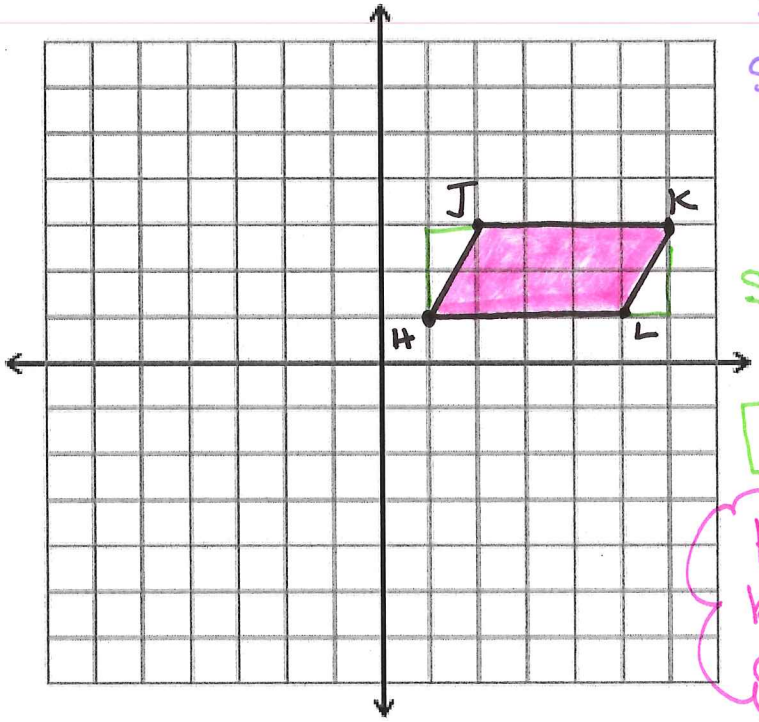
$\square LNPQ$ is a rhombus. Find the length of each side and the measure of each angle.



4. $\overline{LN} = 8mm$ def of Rhombus
5. $\overline{QL} = 8mm$ def of Rhombus
6. $\overline{QP} = 8mm$ def of Rhombus
7. $\angle N = 60°$ op. ∠s are ≅
8. $\angle L = 120°$ con. int ∠s are suppl.
9. $\angle P = 120°$ con. int ∠s are suppl.

Determine if the figures are parallelograms, by definition.

10. $H(1, 1), J(2, 3), K(6, 3), L(5, 1)$



Slope JK = 0

Slope HL = 0

JK // HL

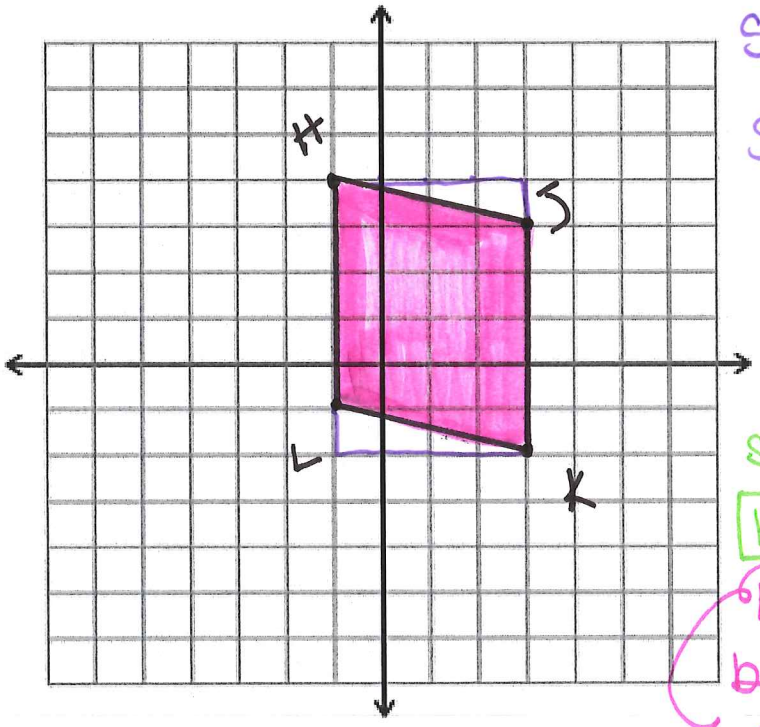
Slope HJ = 2

Slope LK = 2

HJ // LK

HJKL is a parallelogram because opposite sides are parallel

11. $H(-1, 4), J(3, 3), K(3, -2), L(-1, -1)$



Slope $HJ = -\frac{1}{4}$

Slope $LK = -\frac{1}{4}$

HJ // LK

Slope HL = undef.

Slope JK = undef.

HL // JK

HJKL is a parallelogram because opposite sides are parallel.