CORNELL NOTES

TOPIC/OBJECTIVE: Notation

CONTENT/CLASS: Geometry

NAME:

CLASS/PERIOD: 6

DATE: 10/13/15

ESSENTIAL QUESTION: What are some symbols, notation and vocabulary I will need in Geometry?

QUESTIONS:

NOTES:

Notation

Congruent: A shape is congruent ($\cong$) to another shape if they are the same size and same shape (all angles are the same.)
A line or angle is $\cong$ to another line or angle is they are exactly the same size.
Key words: the same, equal

Similar: Two shapes are similar if they are the same shape but not necessarily the same size. Symbol: $\sim$

Eg: Dilations create similar shapes

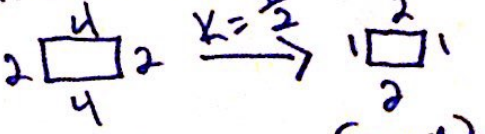

Figure1 $\sim$ Figure2

Approximate: close, but not exactly the same.
An approximate answer is often a rounded decimal.
Eg: $\sqrt{2} \approx 1.41$ Symbol: $\approx$

SUMMARY:

ESSENTIAL QUESTION:

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Types of triangles based on side length

Equilateral: all sides and all angles $\cong$

Isosceles: 1 pair of $\cong$ sides and 1 pair of $\cong$ angles.

Scalene: all different sides and angles.

Label sides and angles:

labeling sides: use the endpoints of the line segment to name it

Eg: $\overline{AB}$, $\overline{BC}$

2 ways to label angles

1) If there is only one angle at a point, use that letter to label the angle.
Eg: $\angle A$ or $\angle C$

2) If there is more than 1 angle made at a point you must use 3 letter angle notation. Start with an end point of a segment making the angle.
Eg: $\angle CBD$ or $\angle ABD$

(2)

SUMMARY:

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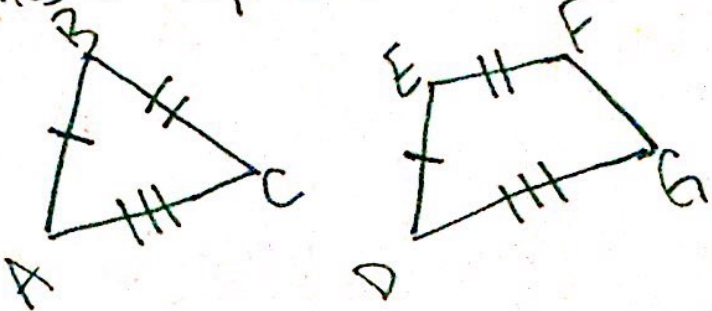
Congruent Side and Angle Notation

When sides are congruent, we use sets of lines to represent this



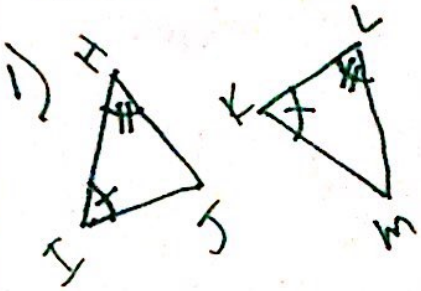
$\overline{AB} \cong \overline{DE}$

$\overline{BC} \cong \overline{EF}$

$\overline{AC} \cong \overline{DG}$

There are two ways to represent $\cong$ angles.

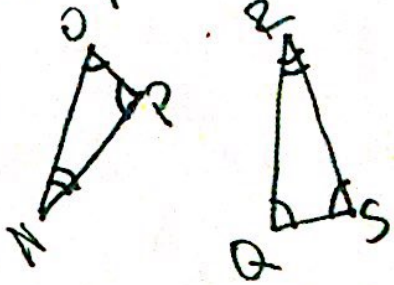
1)



$\angle I \cong \angle K$

$\angle H \cong \angle L$

2)



$\angle O \cong \angle P \cong Q \cong S$

$\angle N \cong \angle R$

(3)

*When lines or angles are marked in the same way, that means they are $\cong$.

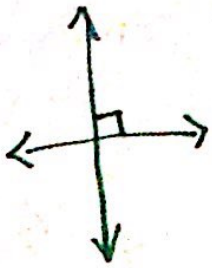
SUMMARY:

QUESTIONS:

NOTES:

Perpendicular lines: when lines or segments meet at 90°

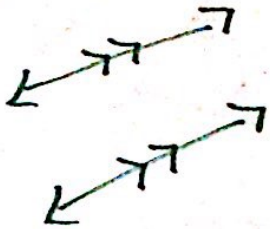
Notation:



Symbol: ⊥

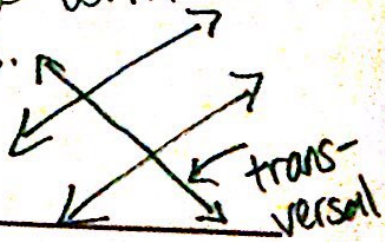
Parallel lines: lines or segments that will never intersect (touch).

Notation:



Symbol: ||

Transversal: A line that crosses 2 or more other lines. We will mostly work with transversals across parallel lines.



SUMMARY:

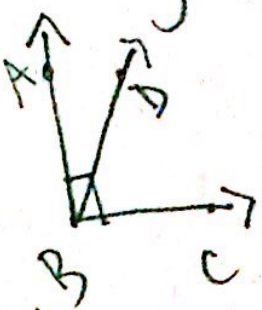
QUESTIONS:

NOTES:

Complementary + Supplementary Angles

Complementary angles add up to 90°

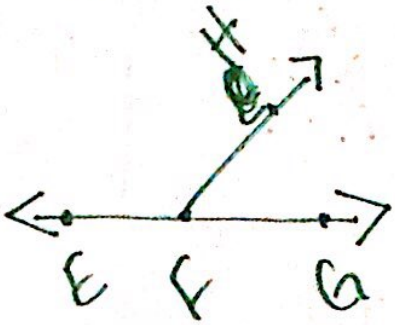
Eg:



Since ∠ABC is 90°
then ∠ABC and ∠DBC are complementary

Supplementary angles add up to 180°

Eg:



∠EFG is 180° (a straight line)
so ∠EFH and ∠HFG are supplementary

SUMMARY: