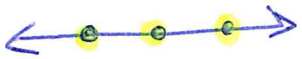
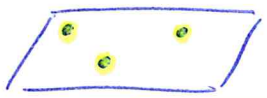
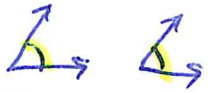
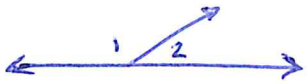
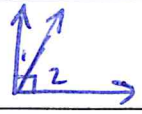
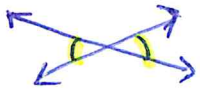
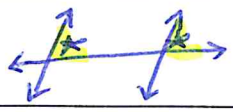
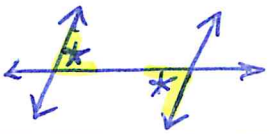
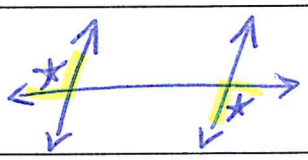
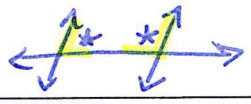
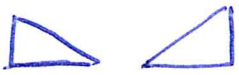
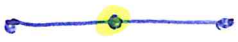
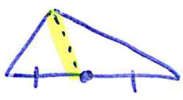
Final Exam Review
Geometry Semester 1

Name: Key

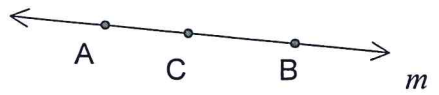
Vocabulary and Notation- Final Review part 1

1. Vocabulary:	Notation/Rule	Picture
Point		
Line		
Plane		
Ray		
Segment		
Collinear points		
Coplanar points		
Congruent		
Supplementary angles		
Linear pair		
Complementary angles		
Vertical angles		
Corresponding angles		
Alternate interior angles		

Alternate exterior angles		
Consecutive interior angles		
Reflection		
Rotation		
Translation		
Dilation		
Rigid Transformations		See Above
Vertical stretch		
Horizontal Stretch		
Angle Bisector		
Altitude		
Midpoint		
Median		

2. Lines, Segments, Rays, Angles, plans

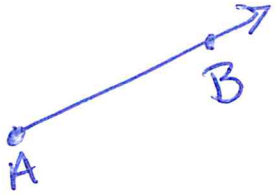
a) Name the line four different ways.



$\overleftrightarrow{AC}$, $\overleftrightarrow{AB}$, $\overleftrightarrow{CB}$, Line m

b) Draw $\overline{AB}$

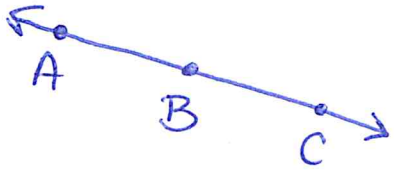
c) Draw $\overrightarrow{AB}$



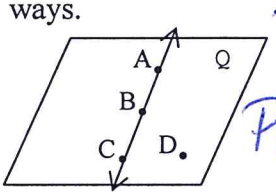
d) Draw $\angle PQR$ with a protractor such that $m\angle PQR = 20°$

Skip

e) Draw three collinear points A, B, and C.



f) Name the plane two different ways.



Plane Q

Plane ABD

a) Name plane that represents the top of the box.

Plane STV

b) Name the intersection plane *SVW* and plane *STX*.

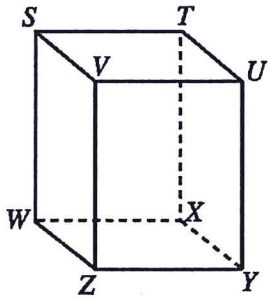
$\overleftrightarrow{SW}$

c) Name another point on plane *SWX*. T

d) Name the intersection plane *VUY*, plane *TUX*, and plane *SVT*. U

e) Name the planes whose intersection is $\overline{ZY}$.

Plane WXZ & Plane VUY



3. Use the figure on the right to…

a) Name a right angle. ∠AOB

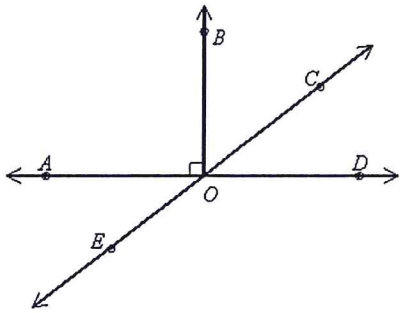
b) Name an acute angle. ∠COD

c) Name an obtuse angle. ∠EOB

d) Name a supplement of ∠DOE. ∠AOE

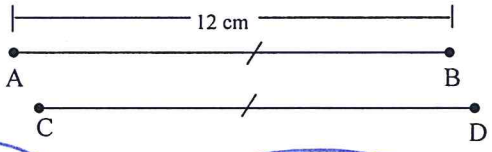
e) Name two angles that are complementary. ∠BOC & ∠DOC

f) Name two segments that are perpendicular. $\overline{AD}$ & $\overline{OB}$



4. Circle the statements that are true and use correct notation for each diagram. Cross out the incorrect statements. Make sure you understand the difference between = & ≅, *AB* & $\overline{AB}$, and $m\angle ABC$ & $\angle ABC$.

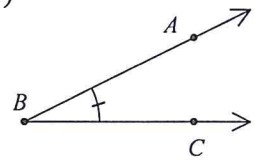
a)

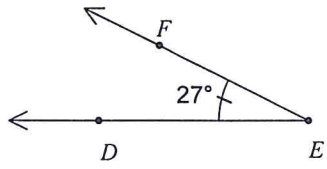


$\overline{AB} \cong \overline{CD}$, ~~$AB \cong CD$~~, $AB = CD$,

$AB = 12$ cm, ~~$\overline{CD} = 12$ cm~~

b)

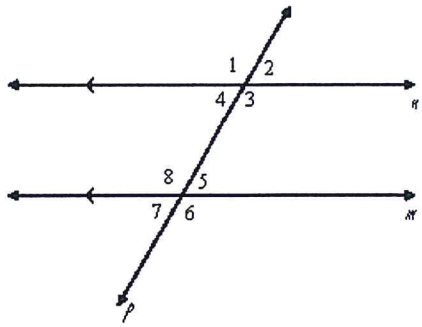




~~$m\angle FDE = 27°$~~, $m\angle FED = 27°$, ~~$\angle ABC = 27°$~~, ~~$m\angle ABC \cong 27°$~~

$m\angle FED = m\angle ABC$, ~~$m\angle FED \cong m\angle ABC$~~, $\angle FED \cong \angle ABC$

4. Use the set of parallel lines cut by a transversal below to answer the questions bellow.



a. In the figure above, what set of angles are vertical?

A. ∠6 & ∠7

C. ∠5 & ∠7

B. ∠4 & ∠7

D. ∠8 & ∠3

b. In the figure above, what set of angles are supplementary?

A. ∠8 & ∠4, they are same-side interior angles

C. ∠8 & ∠3, they are alternate interior angles

B. ∠8 & ∠6, they are vertical angles

D. ∠8 & ∠1, they are corresponding angles

c.. In the figure above, what set of angles are corresponding angles?

A. ∠4 & ∠7, they are congruent

C. ∠6 & ∠7, they are supplementary

B. ∠5 & ∠7, they are congruent

D. ∠1 & ∠7, they are supplementary

d. In the figure above, what set of angles are alternate interior angles?

A. ∠4 & ∠7, they are a linear pair

C. ∠4 & ∠5, they are congruent

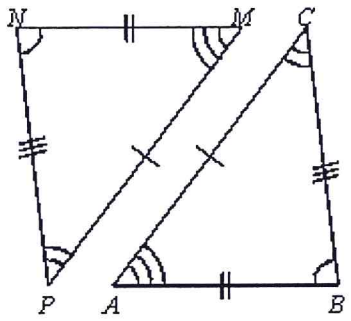
B. ∠1 & ∠6, they are congruent

D. ∠2 & ∠6, they are a linear pair

4. If $BCDE$ is congruent to $OPQR$, then $\overline{DE}$ is congruent to ___?___.

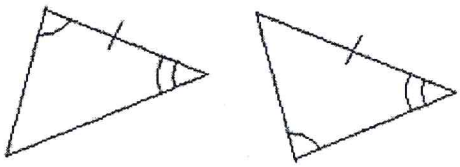
a. $\overline{PQ}$ b. $\overline{OR}$ c. $\overline{OP}$ d. $\overline{QR}$

5. $\angle ABC \cong$ ___?___ $\angle MNP$

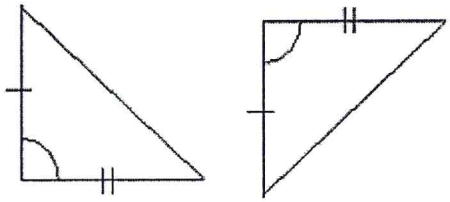


6. In each pair of triangles, parts are congruent as marked. Which pair of triangles is congruent by ASA?

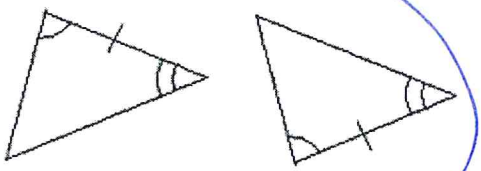
a.



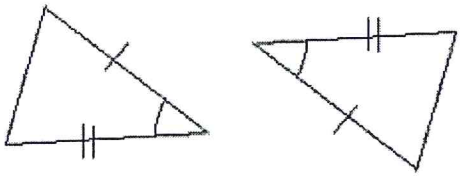
c.



b.



d.



7- List all rigid transformations and explain why they are called rigid. Give an example

Translation They preserve congruence. Examples Vary.
Reflection
Rotation

8- List all the non-rigid transformations and explain why they are non- rigid. Give an example

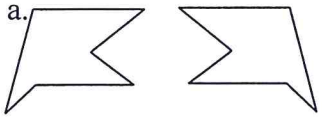
Dilation
Vertical/Horizontal Stretch
Vertical/Horizontal Compression

They do not preserve congruence.

Examples Vary.

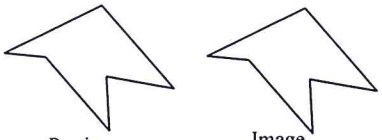
9- Name each type of transformation (choices: reflection, rotation, translation)

a.



Pre-image Image

Reflection



Pre-image Image

Translation

10. Which one of the below transformation preserve congruence? Select all that apply

[A] translation

[B] reflection

[C] rotation

[D] dilation