

MAFS.912.G-CO.1.1

1. Fill in the blanks:

The intersection of two noncollinear rays at a common endpoint is known as \_\_\_\_\_.

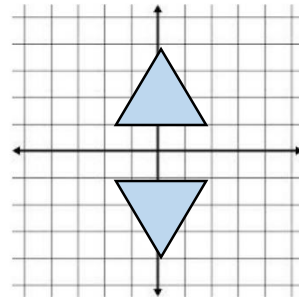
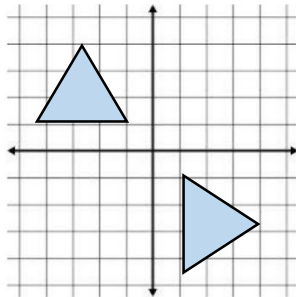
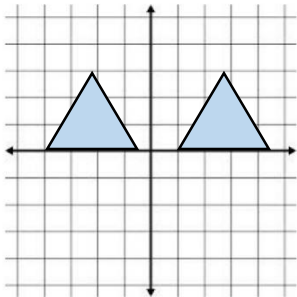
A \_\_\_\_\_ is a location. It has neither shape nor size.

A flat surface made up of points that extends infinitely in all directions is a \_\_\_\_\_.

\_\_\_\_\_ lines are two distinct lines that do not intersect.

MAFS.912.G-CO.1.2

2. Identify each transformation shown as a reflection, a translation, or a rotation.

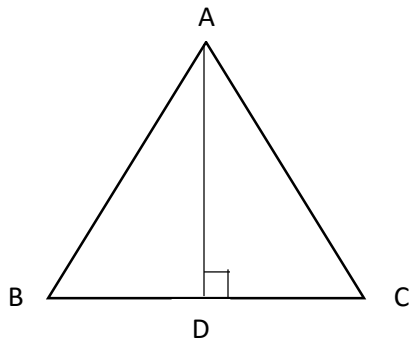


MAFS.912.G-CO.2.7 and MAFS.912.G-CO.2.8

3. Determine which of the following statements are true if  $\triangle CAT \cong \triangle LUV$ . (This is NOT multiple choice!)

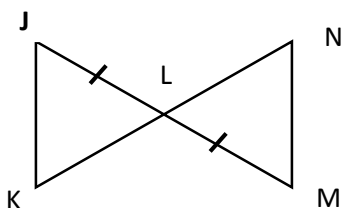
- A)  $\angle C \cong \angle L$     B)  $\overline{CA} \cong \overline{VU}$     C)  $\angle TCA \cong \angle VLU$     D)  $\overline{TA} \cong \overline{VU}$     E)  $\angle TAC \cong \angle VUL$

4. Explain how to prove the two triangles congruent using SAS.



Given D is the midpoint of  $\overline{BC}$ .

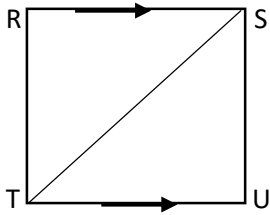
5. What statement will be needed to prove  $\angle JKL \cong \angle MNL$  congruent using ASA?



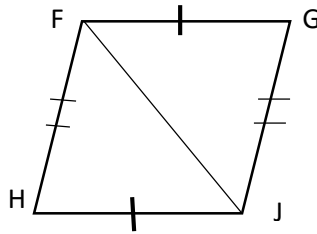
Given  $\angle KJL \cong \angle NML$

6. Which postulate or theorem can be used to prove the following triangles congruent? Write a congruence statement for each pair of triangles. (This is NOT multiple choice!)

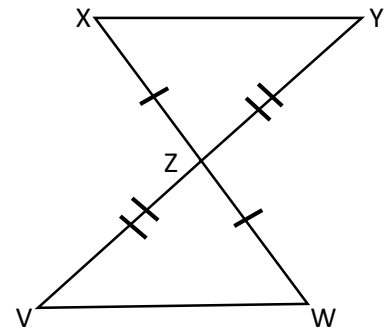
A)



B)

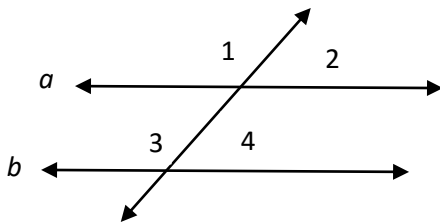


C)



MAFS.912.G-CO.3.9

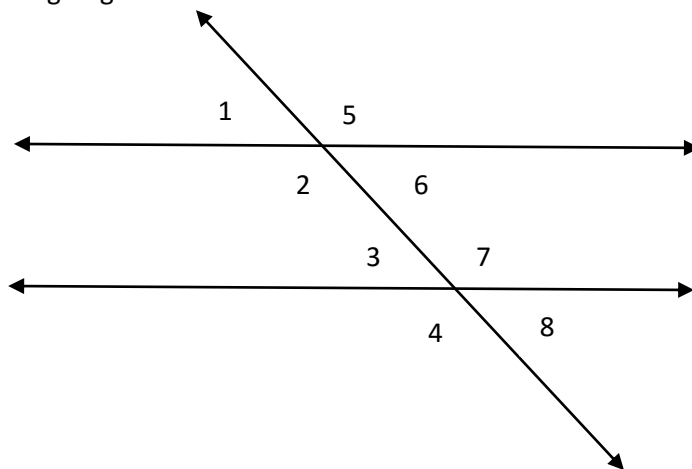
7. Which postulates or theorems listed can be used to prove that line  $a$  is parallel to line  $b$ ? (Select all that apply.)



- $\angle 1 \cong \angle 2$  Alternate Interior Angles
- $\angle 2 \cong \angle 3$  Alternate Interior Angles
- $\angle 1$  and  $\angle 3$  Supplemental Angles
- $\angle 1$  and  $\angle 4$  Supplemental Angles
- $\angle 1 \cong \angle 3$  Corresponding Angles

8. In the drawing below, identify the following. (This is NOT multiple choice!)

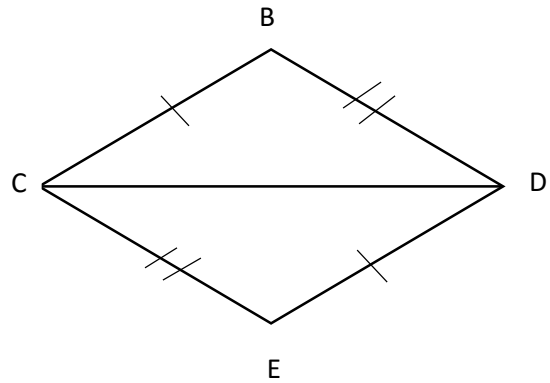
- A) Alternate Interior Angles
- B) Alternate Exterior Angles
- C) Consecutive Interior Angles
- D) Corresponding Angles



MAFS.912.G-CO.3.11

9. Fill in the missing reasons of the proof.

$\overline{BC} \cong \overline{ED}$ $\overline{BD} \cong \overline{EC}$	Given
$\overline{CD} \cong \overline{DC}$	
$\triangle BCD \cong \triangle EDC$	
$\angle B \cong \angle E$	



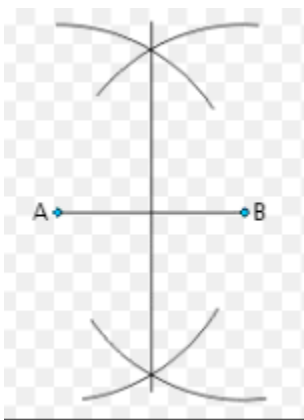
10. Determine whether each statement below is true or false. (This is NOT multiple choice!)

- A. Parallel lines meet at exactly one point.
- B. An angle bisector creates two congruent angles.
- C. Corresponding parts of congruent triangles are congruent.
- D. Supplemental angles have a sum of 90 degrees.
- E. The altitude from the base of an isosceles triangle creates two 90 degree angles.

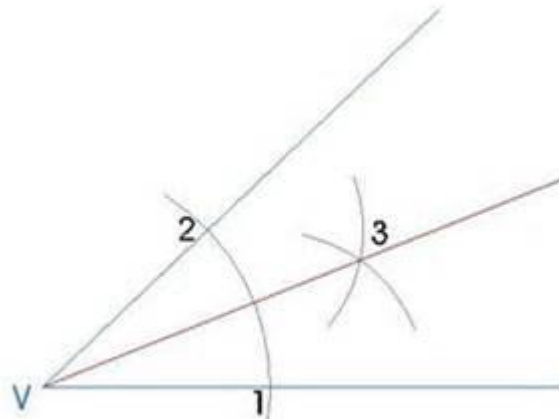
MAFS.912.G-CO.4.12

11. Identify the constructions shown. (This is NOT multiple choice!)

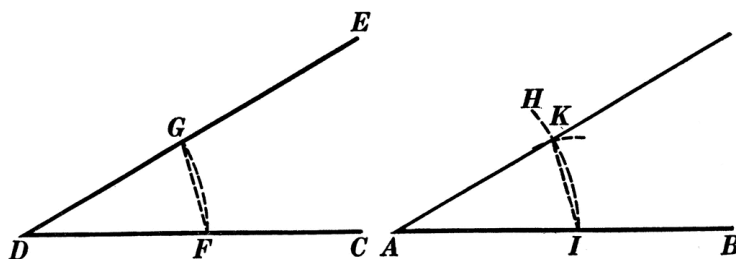
A)



B)

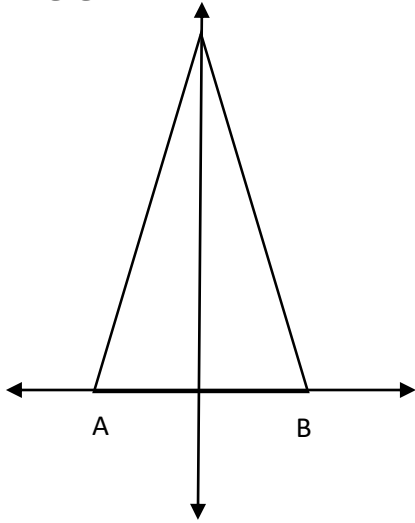


C)



MAFS.912.G-GPE.2.4

12.

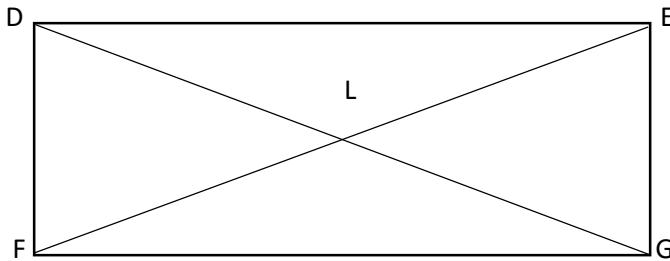


The isosceles triangle shown is placed on a coordinate plane with the y-axis as its altitude.

Find the length of  $\overline{AB}$  and the location of B, if the coordinates of A are  $(-3.2, 0)$ .

MAFS.912.G-SRT.2.5

13.



Given rectangle DEFG.

Determine which statements are true. (This is NOT multiple choice.)

- A.  $DE = FG$
- B.  $FE = DG$
- C.  $FL = EL$
- D.  $\triangle DLF \cong \triangle ELG$
- E.  $\triangle DEG \cong \triangle FLG$
- F.  $\angle DFG$  is a right angle

14. Explain how to prove  $\triangle MNP \cong \triangle ABC$ .

