G.CO.6 - G.CO.9

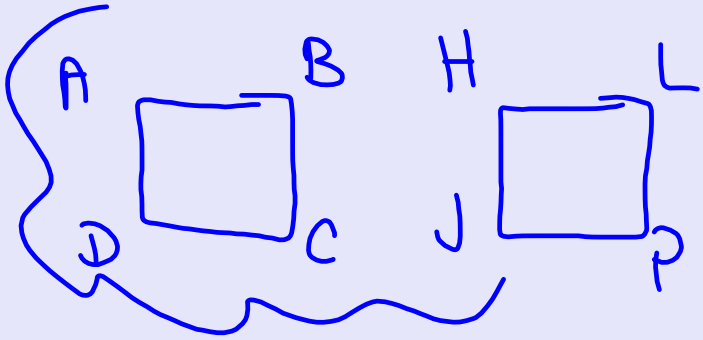
Congruency Statements

Transversals

Congruence Criteria

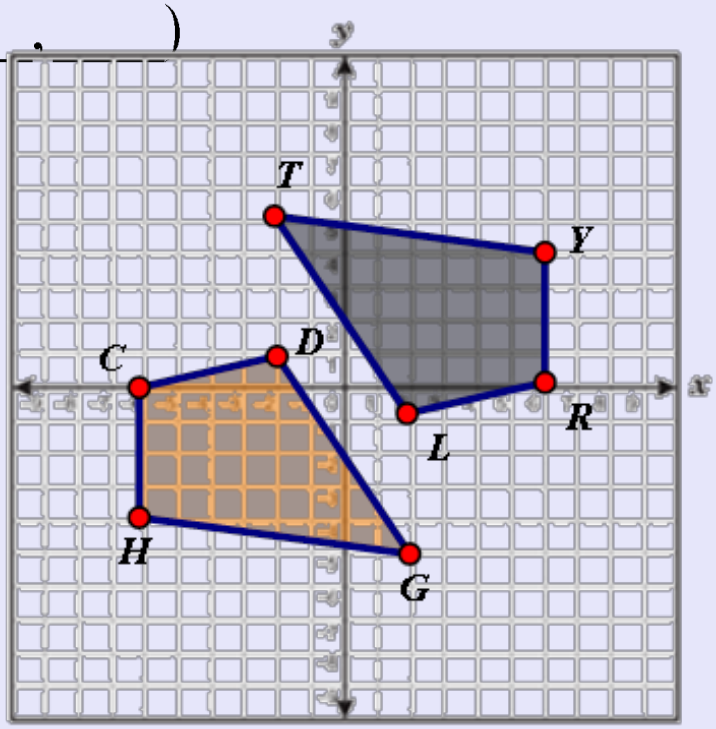
Quadrilateral ABCD is congruent to Quadrilateral HJLP.
Complete the following congruent statements.

a) $\angle B \cong \angle$ J b) $\overline{LP} \cong$ CD c) $\angle P \cong \angle$ D $\overline{DA} \cong$ PH



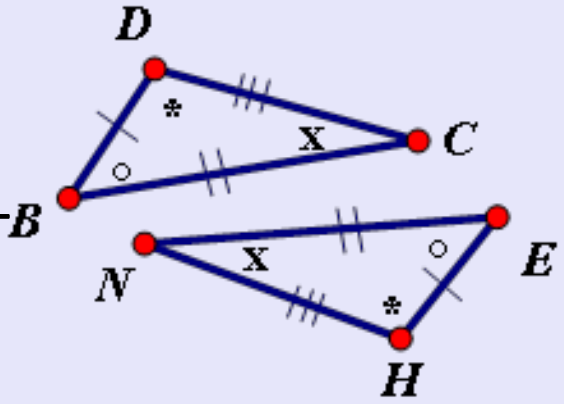
What rule would establish that these two polygons are congruent to each other?

$W(CDGH) -->(_____, _____)$



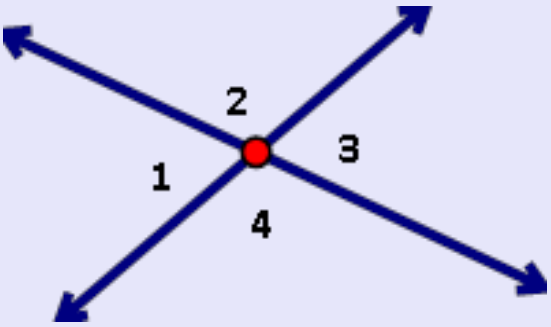
The given pairs of triangles are congruent.
Complete the congruence statements.

$\Delta BCD \cong \Delta$_____



If m∠2 = 127°, then the m∠4 =

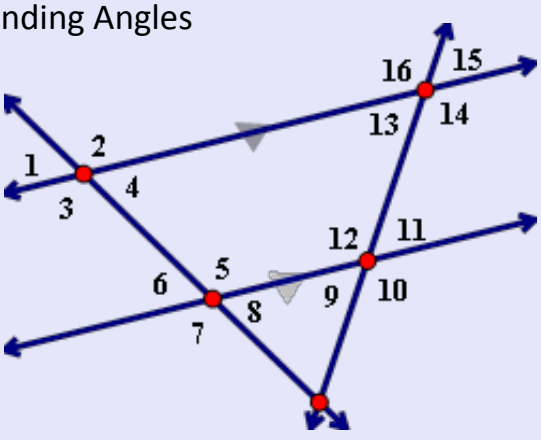
A) 53° B) 63° C) 127° D) 147°



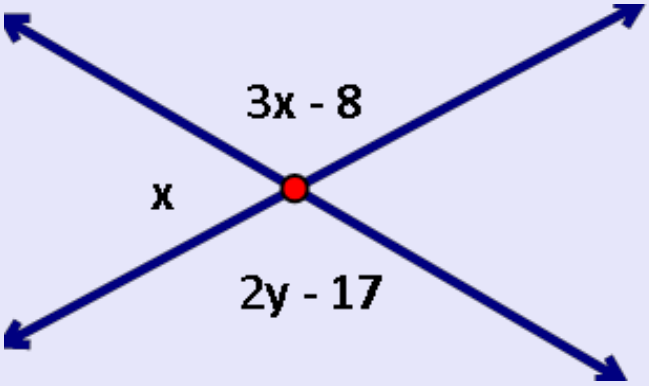
Determine the correct name for ∠4 and ∠8.

A) Same Side Interior B) Alternate Interior Angles

C) Alternate Exterior Angles D) Corresponding Angles



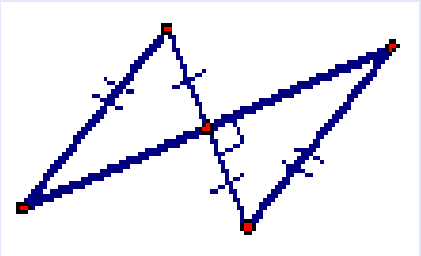
In the diagram, what are the values of x and y?



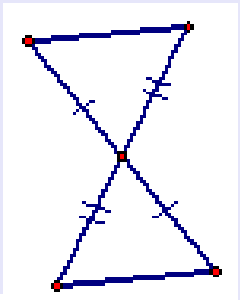
Are the following pairs of triangles congruent?

If they are, then name their congruence criteria.
(SSS, SAS, ASA, AAS, HL)

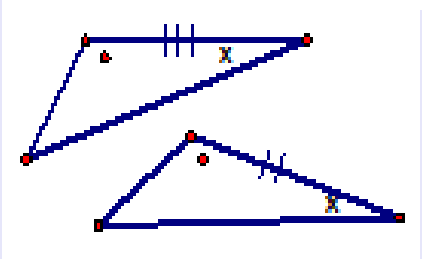
a) Yes / No _____



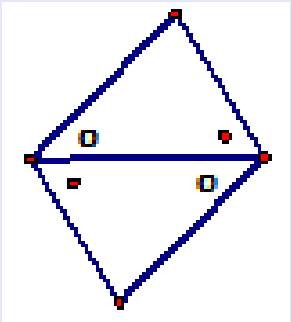
b) Yes / No _____



c) Yes / No _____



d) Yes / No _____



Which of the following rules could represent a transformation that mapped one shape onto to another to establish their congruence?

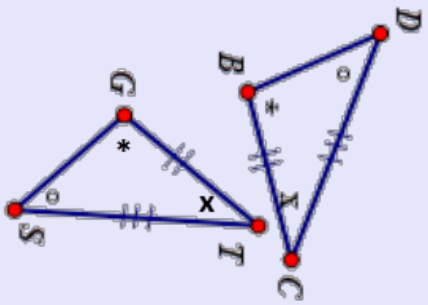
a. $K(x,y) ----> (x-3,3y)$

b. $K(x,y) ----> (2x,y)$

c. $K(x,y) ----> (-y,x+2)$

d. $K(x,y) ----> (5x,5y)$

The given pairs of triangles are congruent. Complete the congruence statements.

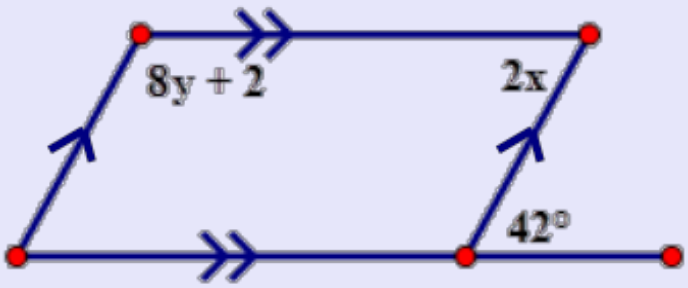


$\Delta TSG \cong \Delta$_____

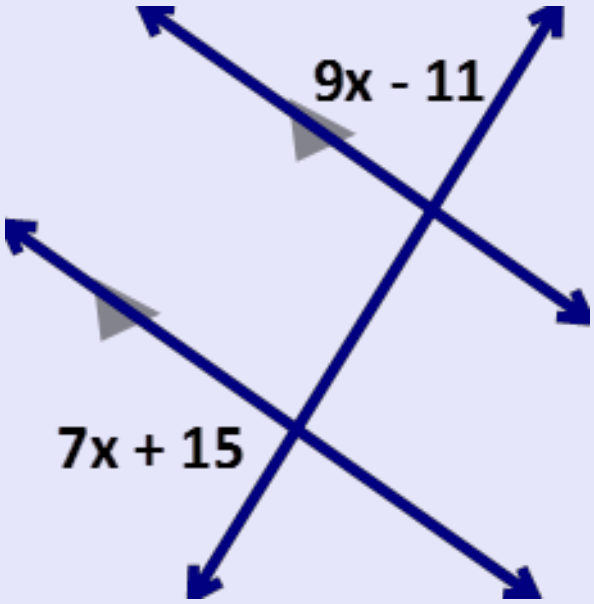
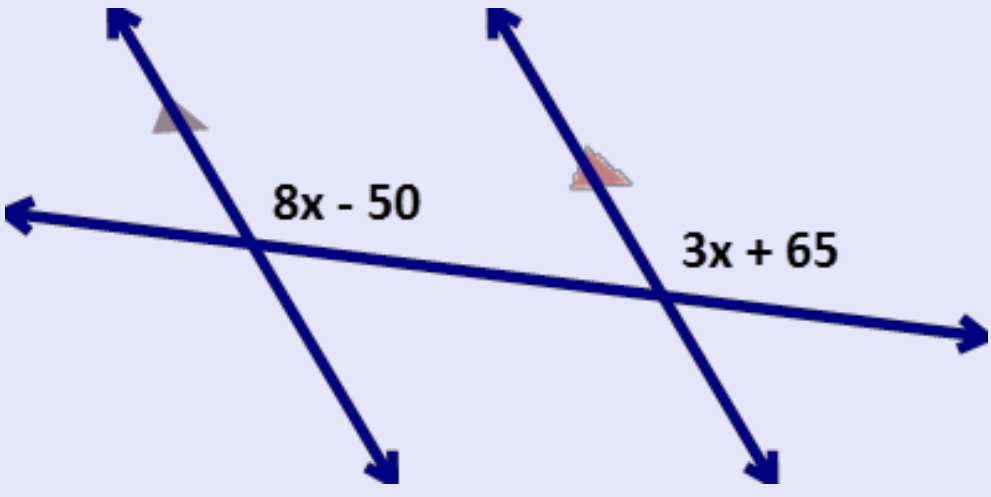
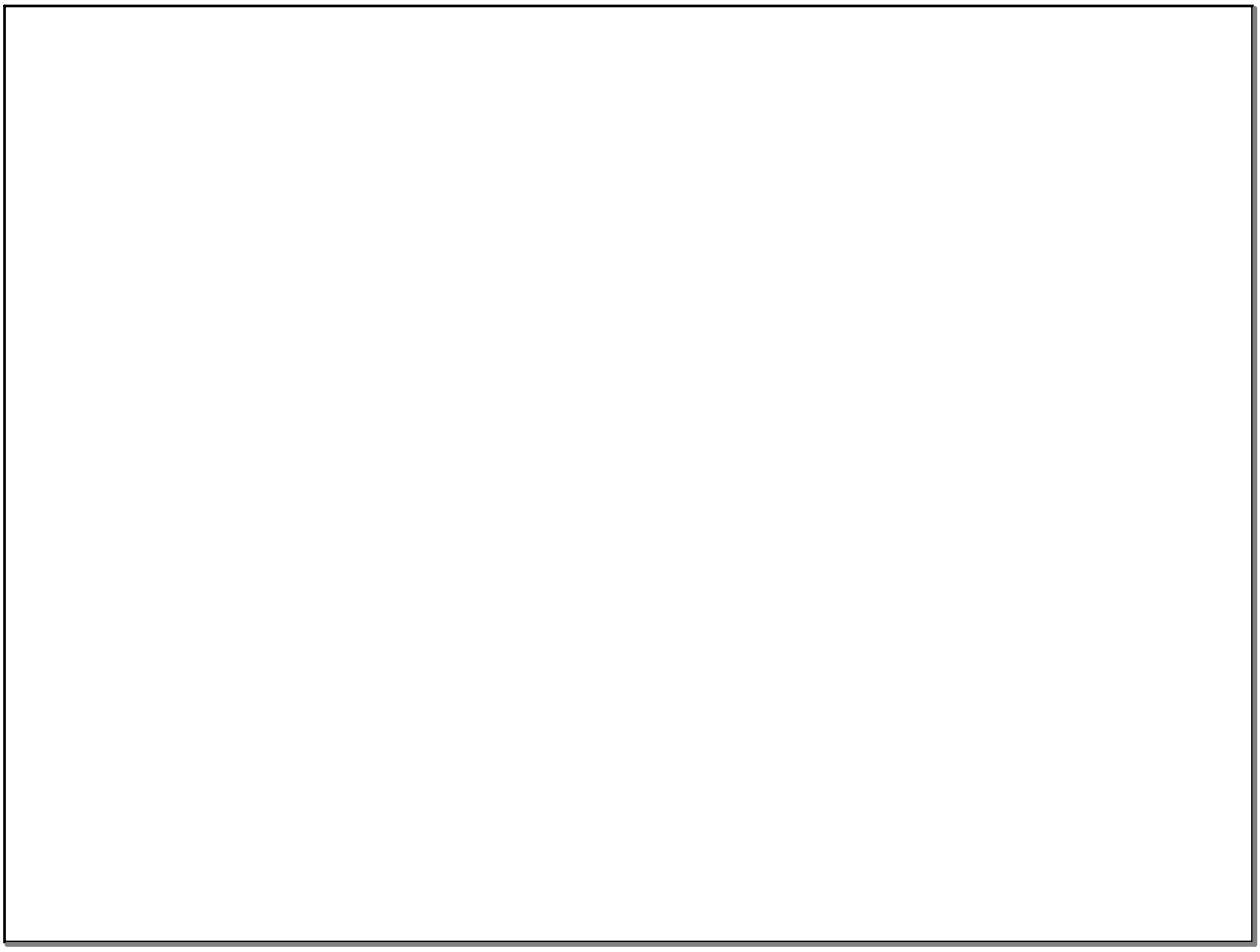
In ΔABC, the included angle of $\overline{AB}$ and $\overline{BC}$ is:

Solve the following.

x = _____ y = _____



x = _____



x = _____