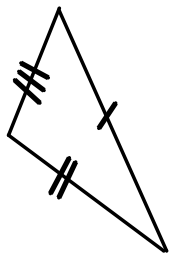
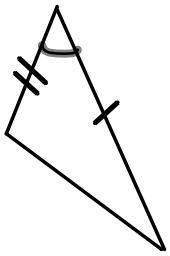
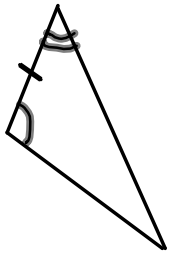
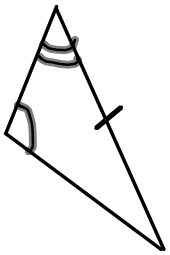
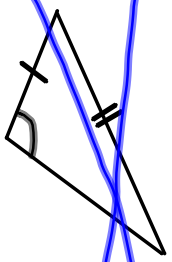
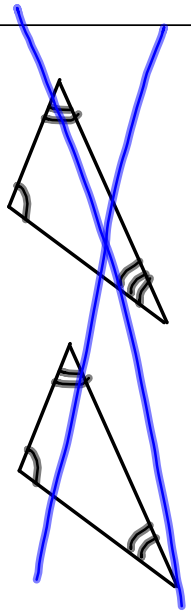
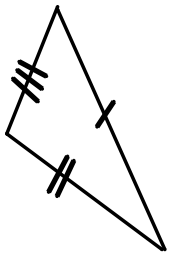
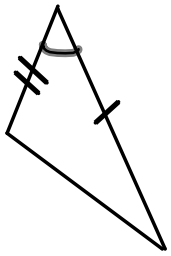
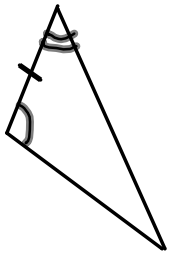
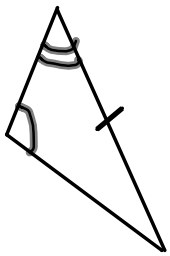
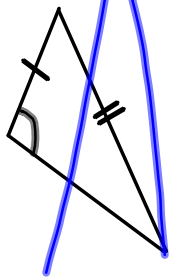
February 04, 2014

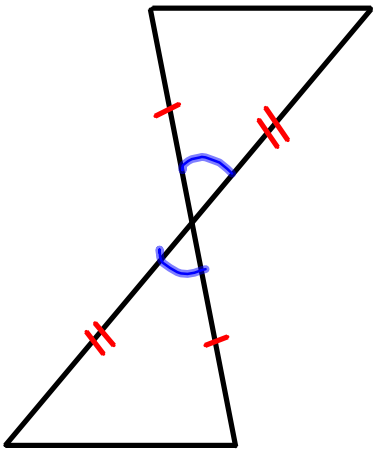
Do-now: Take out (or keep out) Triangle Congruence Investigation from last week.

February 04, 2014

Which triangle congruence postulates can we use to prove two triangles are congruent?

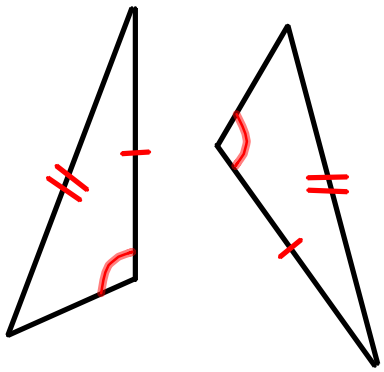
SSS	SAS	ASA	AAS	SSA	AAA
					
					

Are the two triangles below congruent? Why or why not?



SAS

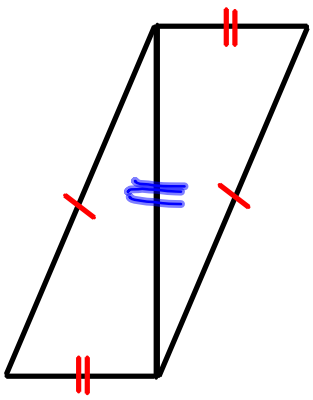
Are the two triangles below congruent? Why or why not?



~~ASS~~

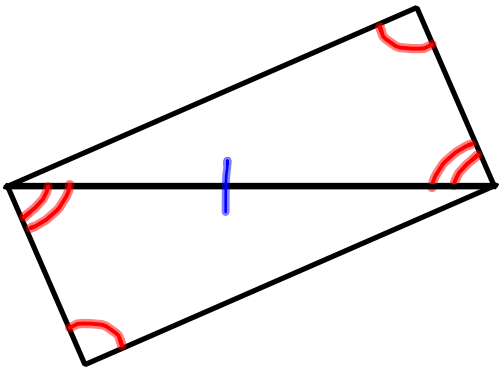
No! Not enough info.

Are the two triangles below congruent? Why or why not?



SSS

Are the two triangles below congruent? Why or why not?

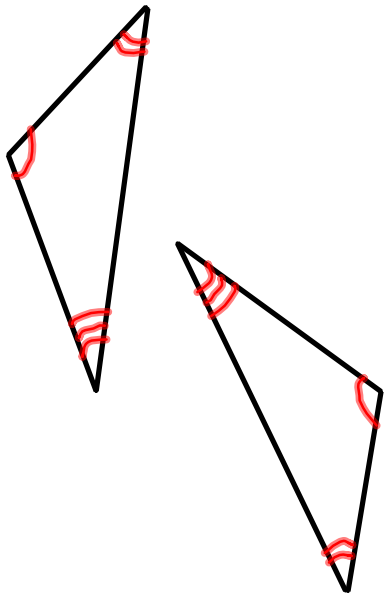


AAS

or

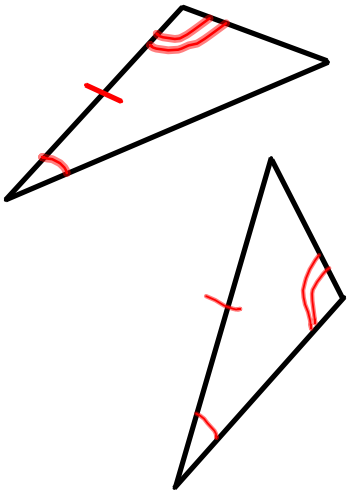
SAA

Are the two triangles below congruent? Why or why not?



Not enough info

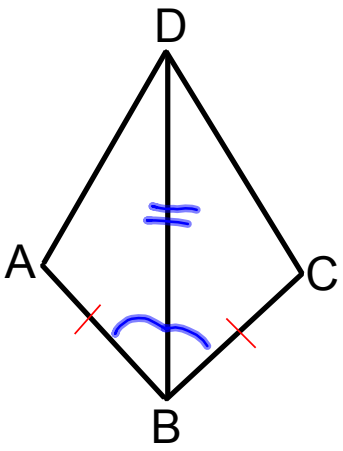
Are the two triangles below congruent? Why or why not?



Not enough info

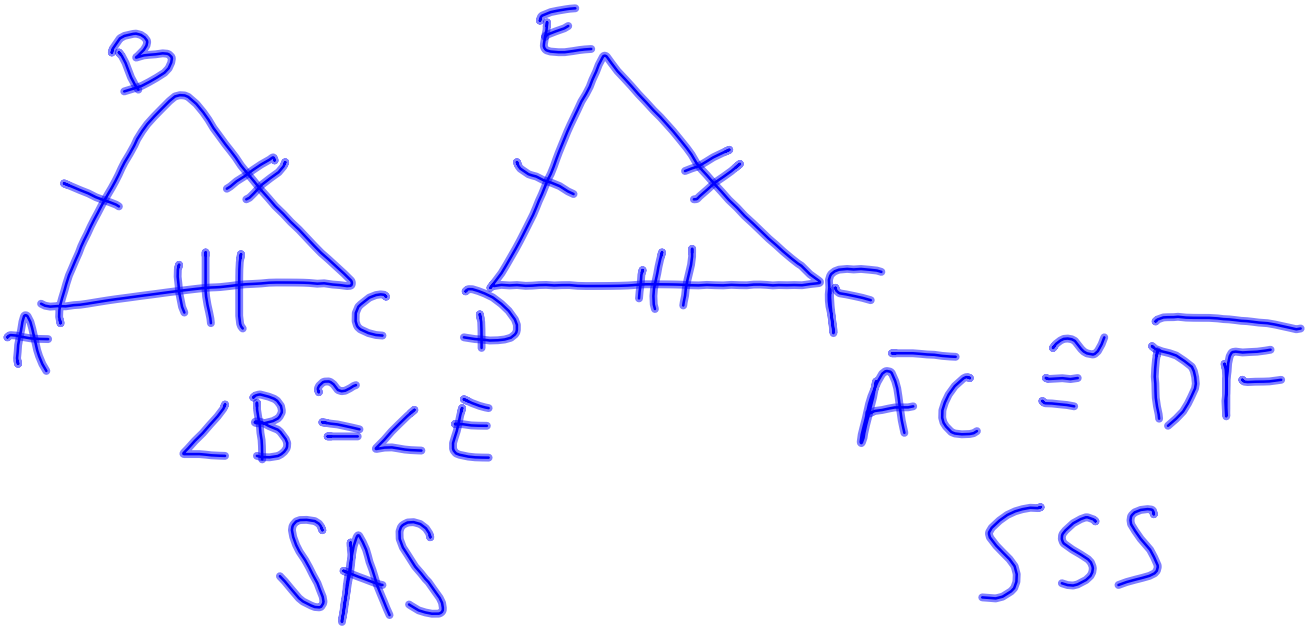
In the figure below, $\overline{AB} \cong \overline{CB}$ and $\overline{DB}$ bisects $\angle ABC$.

Are the two triangles congruent? Why or why not?



SAS

In triangle ABC and DEF, $\overline{AB} \cong \overline{DE}$ and $\overline{BC} \cong \overline{EF}$. Write one additional statement that could be used to prove that the two triangles are congruent. State the method that would be used to prove that the triangles are congruent.



Turn in Triangle Congruence Investigation if you didn't already!

Classwork (in notebook):

page 219 #s 2 - 7

page 250 #s 19 - 27

Just name the Triangle Congruence postulate that proves they're congruent - SSS, SAS, ASA, or AAS, if possible

When done: If the three sides of a triangle measure x, x + 8, and 3x - 7, find all the possible values for x that will create a triangle.

Page 219

2) ASA 3) SSS 4) SAS

5) Not possible 6) AAS 7) Not possible

Page 250

19) SSS 20) Not possible 21) SAS

22) Not possible 23) AAS 24) ASA

25) AAS 26) SAS 27) ASA

$x,\ x+8,\ 3x-7$

$x+x+8>3x-7$

$2x+8>3x-7$

$8>x-7$

$15>x$

$x+8+3x-7>x$

$4x+1>x$

$3x+1>0$

$3x>-1$

$x>-\frac{1}{3}$

$x+3x-7>x+8$

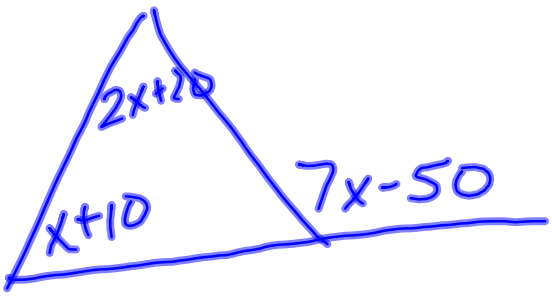
$4x-7>x+8$

$3x-7>8$

$3x>15$

$x>5$

$5<x<15$



$$x+10+2x+20=7x-50$$