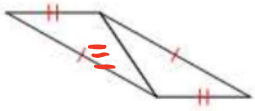
Name _____ 3

SSS and SAS

Hw Section 4.2

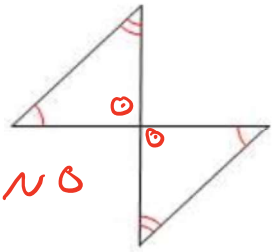
State if the two triangles are congruent. If they are, state why.

1.



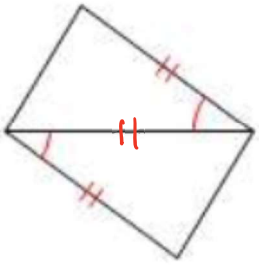
Yes, SSS ≅ Postulate

2.



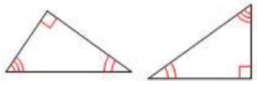
NO

3.



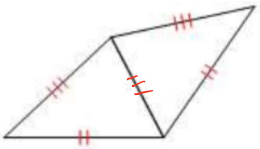
Yes, SAS ≅ Postulate

4.



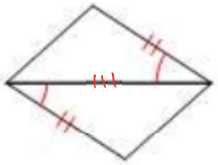
NO

5.



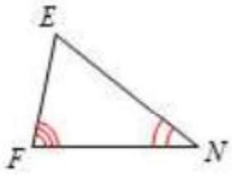
Yes, SSS ≅ Postulate

6.

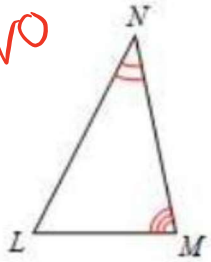


Yes, SAS ≅ Postulate

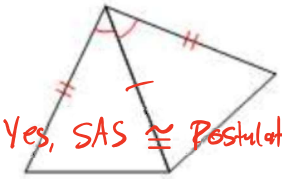
7.



NO

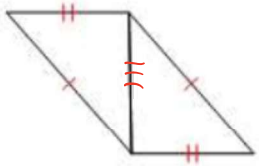


8.



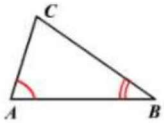
Yes, SAS ≅ Postulate

9.

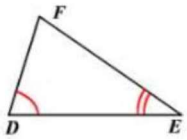


Yes, SSS ≅ Postulate

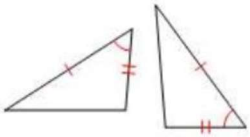
10.



NO

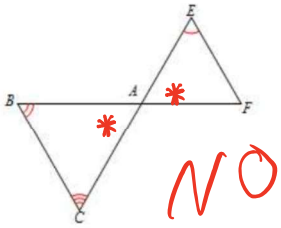


11.



Yes, SAS ≅ Postulate

12.



NO

ALGEBRA REVIEW

SOLVE

$5 - 2(3x - 4) = -7$

$5 - 6x + 8 = -7$

$-6x + 13 = -7$

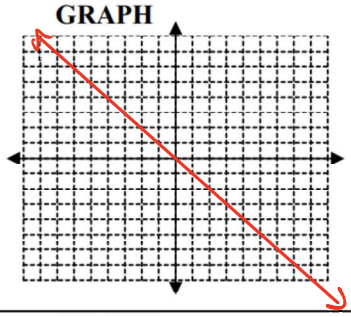
$-6x = -20$

$x = \frac{-20}{-6}$

$x = \frac{10}{3}$

GRAPH

$y = -x$



MULTIPLY

$(5x - 3)(2x + 3)$

$= 10x^2 - 6x + 15x - 9$

$= 10x^2 + 9x - 9$

SOLVE

$\frac{2x - 1}{6} = \frac{x}{4}$ (6, 4)

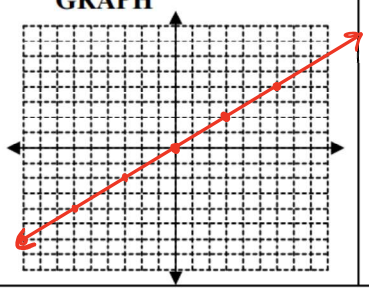
$8x - 4 = 6x$

$-4 = -2x$

$2 = x$

GRAPH

$y = \frac{2}{3}x$



FACTOR

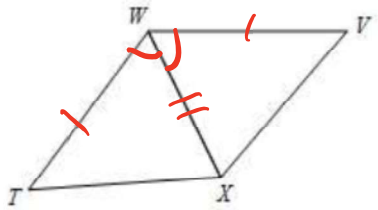
$x^2 - 10x - 24$

$= (x - 12)(x + 2)$

Mark the picture. Answer the question. Prove it.

13.
Given: $\angle TWX \cong \angle VWX$
$\overline{TW} \cong \overline{WV}$

Prove: $\Delta XWV \cong \Delta XWT$



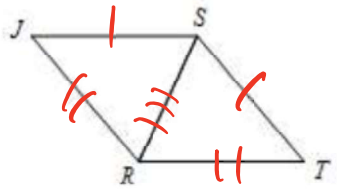
WHY ARE THE TWO TRIANGLES CONGRUENT? SAS

	STATEMENTS	REASONS
1	$\angle TWX \cong \angle VWX$ $\overline{TW} \cong \overline{WV}$	Given
2	$\overline{WX} \cong \overline{WX}$	Congruence of Segments is Reflexive (or Reflexive prop. of $\cong$)
3	$\Delta XWV \cong \Delta XWT$	SAS $\cong$ Postulate

Mark the picture. Answer the question. Prove it.

14.
Given: $\overline{ST} \cong \overline{SJ}$
$\overline{JR} \cong \overline{TR}$

Prove: $\Delta RST \cong \Delta RSJ$



WHY ARE THE TWO TRIANGLES CONGRUENT? SSS

	STATEMENTS	REASONS
1	$\overline{ST} \cong \overline{SJ}$ $\overline{JR} \cong \overline{TR}$	Given
2	$\overline{SR} \cong \overline{SR}$	Congruence of Segments is Reflexive (or Reflexive prop. of $\cong$)
3	$\Delta RST \cong \Delta RSJ$	SSS $\cong$ Postulate