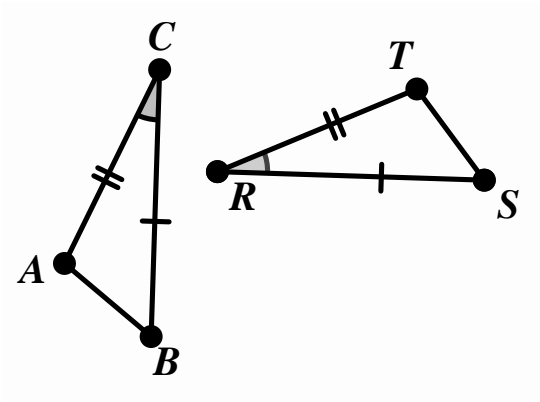
READY, SET, GO! Name Period Date

READY

Topic: Corresponding parts of figures and transformations.

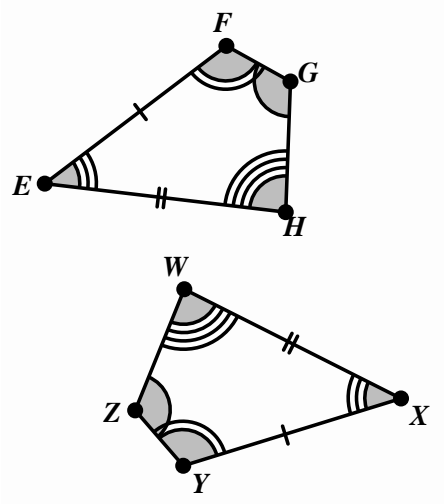
Given the figures in each sketch with congruent angles and sides marked, first list the parts of the figures that correspond (For example, in #1, $\angle C \cong \angle R$) Then determine a reflection occurred as part of the sequence of transformations that was used to create the image.



Congruencies

$\angle C \cong \angle R$
$\overline{BC} \cong \overline{RS}$
$\overline{AC} \cong \overline{RT}$

Reflected? (Yes) or No



Congruencies

$\angle G \cong \angle Z$
$\angle F \cong \angle Y$
$\angle E \cong \angle X$
$\angle H \cong \angle W$
$\overline{EF} \cong \overline{XY}$
$\overline{EH} \cong \overline{XW}$

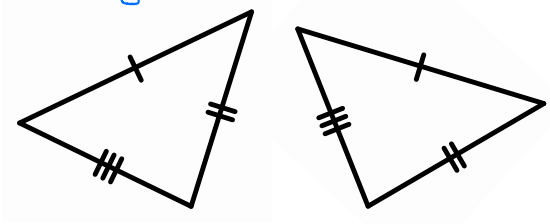
Reflected? Yes or (No)

SET

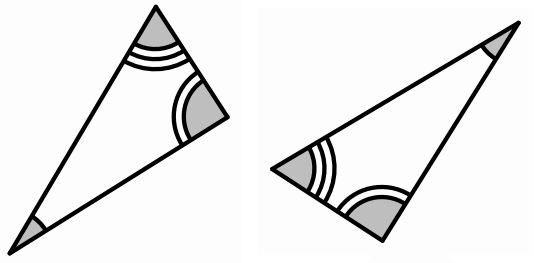
Topic: Triangle Congruence

Explain whether or not the triangles are congruent, similar, or neither based on the markings that indicate congruence.

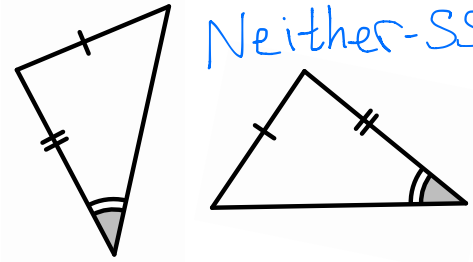
3. Congruent - SSS



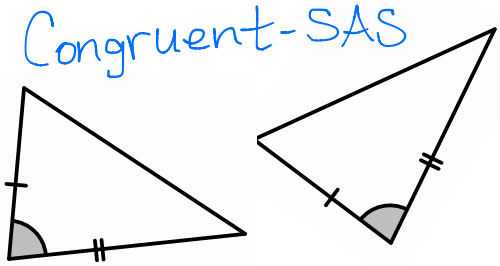
4. Similar - AAA



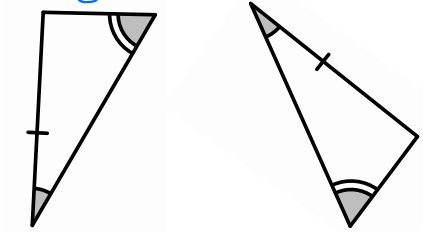
5. Neither - SSA



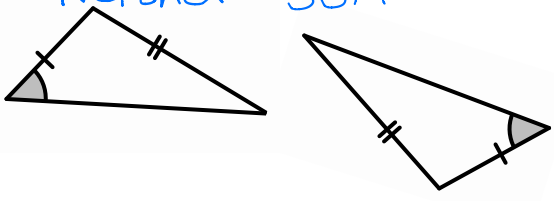
6. Congruent - SAS



7. Congruent - ASA

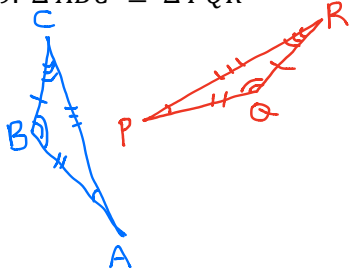


8. Neither - SSA

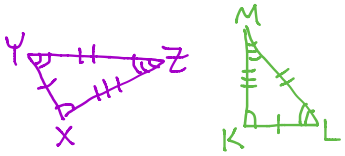


Use the given congruence statement to draw and label two triangles that have the proper corresponding parts congruent to one another.

9. $\Delta ABC \cong \Delta PQR$



10. $\Delta XYZ \cong \Delta KLM$



GO

Topic: Solving equations and finding recursive rules for sequences.

Solve each equation for *t*.

11. $\frac{3t-4}{5} = 5$

$5 \cdot \frac{3t-4}{5} = 5 \cdot 5$

$3t - 4 = 25$

$+4 \quad +4$

$\frac{3t}{3} = \frac{29}{3}$

$t = \frac{29}{3}$

12. $10 - t = 4t + 12 - 3t$

$+t \quad 10 - t = t + 12 \quad +t$

$10 = 2t + 12$

$-12 \quad -12$

$\frac{-2}{2} = \frac{2t}{2}$

$-1 = t$

13. $P = 5t - d$

$+d \quad +d$

$\frac{P+d}{5} = \frac{5t}{5}$

$t = \frac{P+d}{5}$

14. $xy - t = 13t + w$

$+t \quad +t$

$xy = 14t + w$

$-w \quad -w$

$\frac{xy-w}{14} = \frac{14t}{14}$

$t = \frac{xy-w}{14}$

Use the given sequence of number to write a recursive rule for the *n*th value of the sequence.

15. 5, 15, 45, ...

$f(n) = 3f(n-1)$

$f(1) = 5$

16. $\frac{1}{2}, 0, -\frac{1}{2}, -1, \ldots$

$f(n) = f(n-1) - \frac{1}{2}$

$f(1) = \frac{1}{2}$

17. 3, -6, 12, -24, ...

$f(n) = -3 \cdot f(n-1)$

$f(1) = 3$

18. $\frac{1}{2}, \frac{1}{4}, \frac{1}{8}, \ldots$

$f(n) = \frac{1}{2} \cdot f(n-1)$

$f(1) = \frac{1}{2}$