

Name: Key

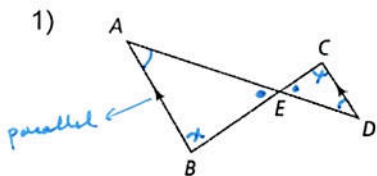
Period: _____

Checkpoint 6B

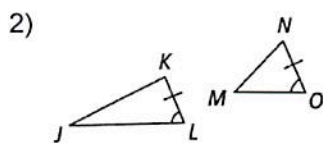
Integrated Math 2

Answer the questions thoroughly including any necessary math or explanations.

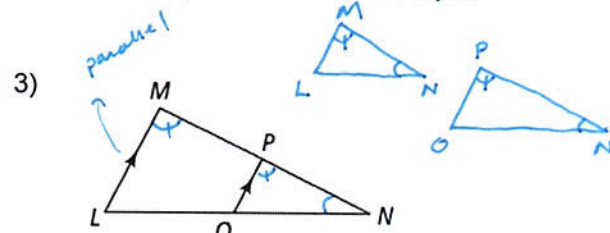
Determine whether the triangles are similar. If so, write a similarity statement and name the postulate or theorem you used. If they are not similar, explain why not.



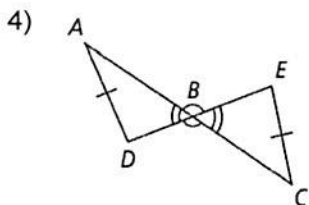
Yes, $\triangle AEB \sim \triangle DEC$
by AA~



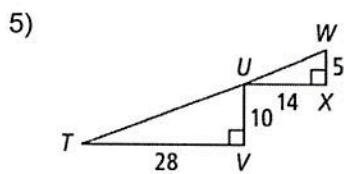
No Δ 's are
not ~
Not enough info
given



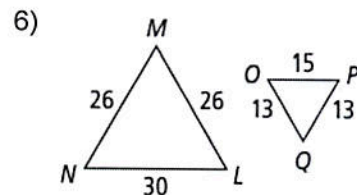
Yes, $\triangle LMN \sim \triangle OPN$
by AA~



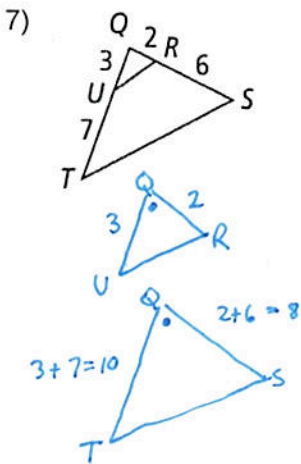
No Δ 's are
not ~
Not enough info



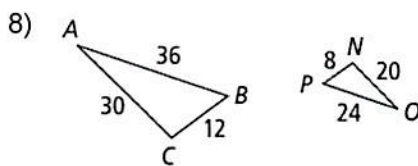
$5 \leftrightarrow 10$
 $14 \leftrightarrow 28$
 $\frac{5}{10} = \frac{14}{28}$
 $0.5 = 0.5 \checkmark$
 $\angle V \cong \angle X$
 $\therefore \triangle WXU \sim \triangle UVT$
by SAS~



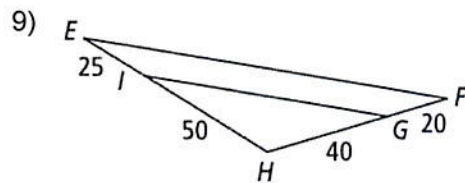
$26 \leftrightarrow 13$
 $26 \leftrightarrow 13$
 $30 \leftrightarrow 15$
 $\therefore \triangle MNL \sim \triangle OPQ$
by SSS~
 $\frac{26}{13} = \frac{26}{13} = \frac{30}{15}$
 $2 = 2 = 2 \checkmark$



$2 \leftrightarrow 8$
 $3 \leftrightarrow 10$
 $\frac{2}{8} \neq \frac{3}{10}$
Not equal
 $\therefore \Delta$'s not ~

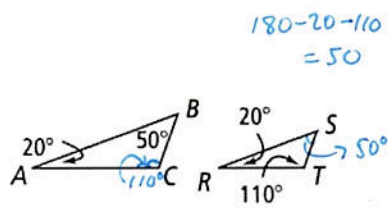


$12 \leftrightarrow 8$
 $30 \leftrightarrow 20$
 $36 \leftrightarrow 24$
 $\frac{12}{8} = \frac{30}{20} = \frac{36}{24}$
 $\frac{3}{2} = \frac{3}{2} = \frac{3}{2} = 1.5$
 $\therefore \triangle ABC \sim \triangle OPN$
by SSS~



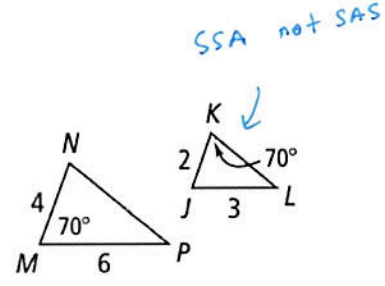
$40 \leftrightarrow 60$
 $50 \leftrightarrow 75$
 $\therefore \triangle IGH \sim \triangle HEF$
by SAS~
 $\frac{40}{60} = \frac{50}{75}$
 $\frac{2}{3} = \frac{2}{3} \checkmark$

10)



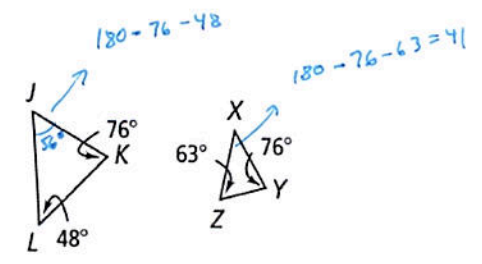
Yes, $\triangle ABC \sim \triangle RST$ by
AA~

11)



\triangle 's not ~

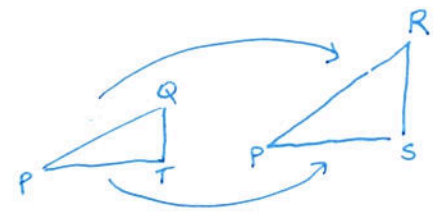
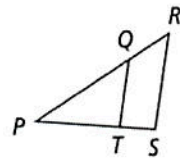
12)



\triangle 's not ~

13)

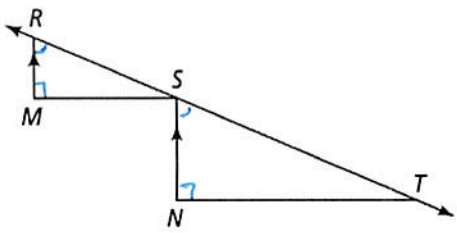
Given: $PQ = \frac{3}{4} PR$, $PT = \frac{3}{4} PS$
Prove: $\triangle PQT \sim \triangle PRS$



Statements	Reasons
1) $PQ = \frac{3}{4} PR$ and $PT = \frac{3}{4} PS$	1) Given
2) $\frac{PQ}{PR} = \frac{3}{4}$ and $\frac{PT}{PS} = \frac{3}{4}$	2) Divide both sides by PR and PS
3) $\frac{PQ}{PR} = \frac{PT}{PS}$	3) Corresponding sides are proportional
4) $\angle P \cong \angle P$	4) Reflexive \angle 's are \cong
5) $\triangle PQT \sim \triangle PRS$	5) SAS ~

14)

Given: $\overline{RM} \parallel \overline{SN}$, $\overline{RM} \perp \overline{MS}$,
 $\overline{SN} \perp \overline{NT}$
Prove: $\triangle RSM \sim \triangle STN$



Statements	Reasons
① $\overline{RM} \parallel \overline{SN}$ $\overline{RM} \perp \overline{MS}$ $\overline{SN} \perp \overline{NT}$	① Given
② $\angle RMS$ rt. \angle $\angle SNT$ rt. \angle	② If two segments are \perp , they form rt. \angle .
③ $\angle RMS \cong \angle SNT$	③ Rt. \angle 's are \cong
④ $\angle MRS \cong \angle NST$	④ \parallel lines \Rightarrow Corresponding \angle 's are \cong .
⑤ $\triangle RMS \sim \triangle SNT$	⑤ AA~