Review Guide for Unit 7 Test **Name:** _____

Basic Vocab Review

1. Complement & Supplement

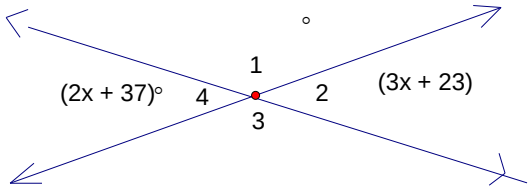
Measure of Given Angle	Measure of Complement	Measure of Supplement
	77°	

2. Vertical Angles

x = _____ m∠3 = _____

m∠1 = _____ m∠4 = _____

m∠2 = _____



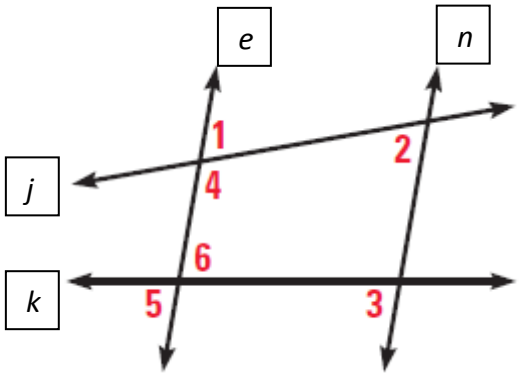
3. Name a pair of angles.

Alternate Exterior _____ Same Side Interior _____ Alternate Interior _____

Corresponding, _____

4. If m∠2 + m∠4 = 180° , then lines _____ are parallel, the transversal is line _____ and

5. the angle relationship is _____.



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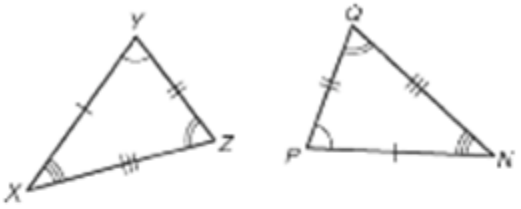
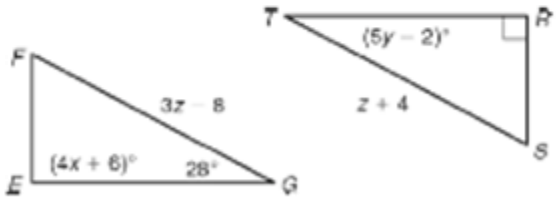
Congruent Triangles Review

6. **Given: $\triangle XYZ \cong \triangle NPQ$. Identify the congruent corresponding parts.**



1. $\angle Z \cong$ _____
2. $\overline{YZ} \cong$ _____
3. $\angle P \cong$ _____
4. $\angle X \cong$ _____
5. $\overline{NQ} \cong$ _____
6. $\overline{PN} \cong$ _____

7. **Given: $\triangle EFG \cong \triangle RST$. Find each value below.**



7. $x =$ _____
8. $y =$ _____
9. $m\angle F =$ _____
10. $ST =$ _____

8. **Given:** $\triangle CDE \cong \triangle HIJ$, $m\angle D = (5y + 1)°$, and $m\angle I = (6y - 25)°$.
Find y and $m\angle D$.

9. **Given:** $\triangle CDE \cong \triangle HIJ$, $DE = 9x$, and $IJ = 7x + 3$. Find x and DE.

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Congruent Triangles Review Cont'd (Proofs)

11. Complete the proof.

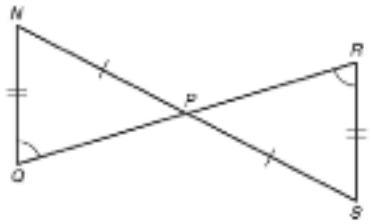
Given: $\angle Q \cong \angle R$

P is the midpoint of $\overline{QR}$.

$\overline{NQ} \cong \overline{SR}, \overline{NP} \cong \overline{SP}$

Prove: $\triangle NPQ \cong \triangle SPR$

Proof:



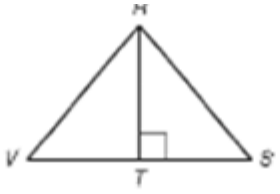
Statements	Reasons
1. $\angle Q \cong \angle R$	1. Given
2. $\angle NPQ \cong \angle SPR$	2. a. _____
3. $\angle N \cong \angle S$	3. b. _____
4. P is the midpoint of $\overline{QR}$.	4. c. _____
5. d. _____	5. Def. of mdpt.
6. $\overline{NQ} \cong \overline{SR}, \overline{NP} \cong \overline{SP}$	6. e. _____
7. $\triangle NPQ \cong \triangle SPR$	7. f. _____

6. Complete the proof.

Given: T is the midpoint of $\overline{VS}$.

$\overline{RT} \perp \overline{VS}$

Prove: $\triangle RST \cong \triangle RVT$



Statements	Reasons
1. T is the midpoint of $\overline{VS}$.	1. Given
2. a. _____	2. Def. of mdpt.
3. $\overline{RT} \perp \overline{VS}$	3. b. _____
4. _____	4. c. _____
5. d. _____	5. Rt. $\angle \cong$ Thm.
6. $\overline{RT} \cong \overline{RT}$	6. e. _____
7. $\triangle RST \cong \triangle RVT$	7. f. _____

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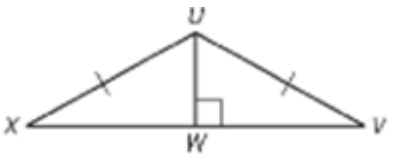
2. **Given:** $\triangle UXW$ and $\triangle UVW$ are right $\triangle$s.
$\overline{UX} \cong \overline{UV}$
Prove: $\angle X \cong \angle V$
Proof:



Statements	Reasons
1. $\triangle UXW$ and $\triangle UVW$ are rt. $\triangle$s.	1. Given
2. $\overline{UX} \cong \overline{UV}$	2. a. _____
3. $\overline{UW} \cong \overline{UW}$	3. b. _____
4. c. _____	4. d. _____
5. $\angle X \cong \angle V$	5. e. _____

Dilations and Midsegment Review:

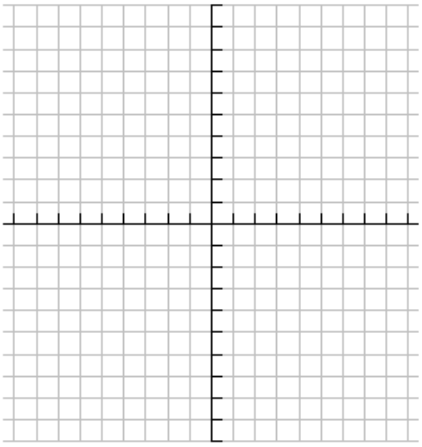
13. Plot the following points A(-2, 4), B (1, -3), and C(-5, -1).

Draw the image after it has been dilated by a scale factor of k=2

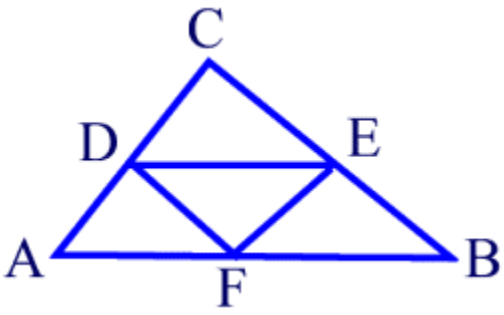
A' = _____

B' = _____

C' = _____



14. Given $AC = 42$, $CB = 46$, $AB = 48$. D, E, F are midpoints.
Find the perimeter of triangle DEF.



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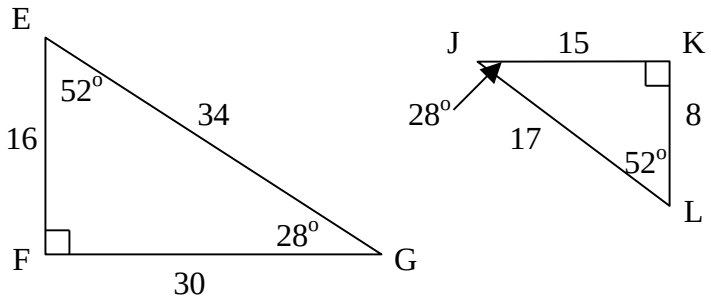
Similar Triangles Review:

Tell if the figures are similar. If they are, write a similarity <u>postulate</u> and <u>statement</u> using the symbol for similar, ~, and give the scale factor from the smaller polygon to the larger one. If they are not similar, explain why.

15.



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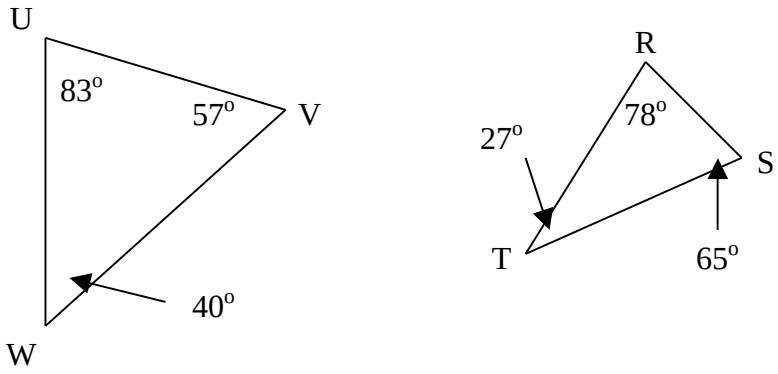
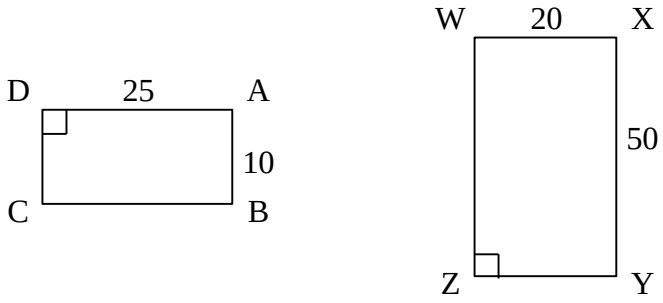


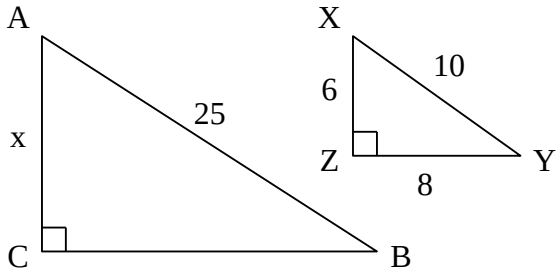
17.



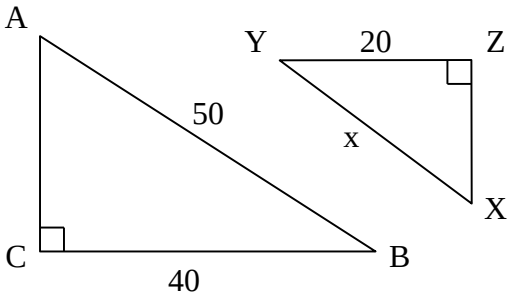
18. Suppose $\Delta CAN \sim \Delta JOY$. If $m\angle A = 96^o$, $m\angle N = 46^o$ and $m\angle C = 38^o$, then $m\angle Y =$ _____, $m\angle J =$ _____ and $m\angle O =$ _____.

Find the missing side lengths in each pair of similar figures.

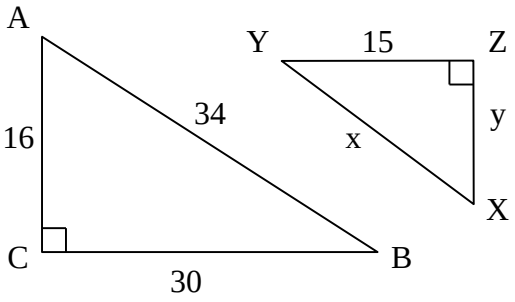
19. $\Delta ABC \sim \Delta XYZ$



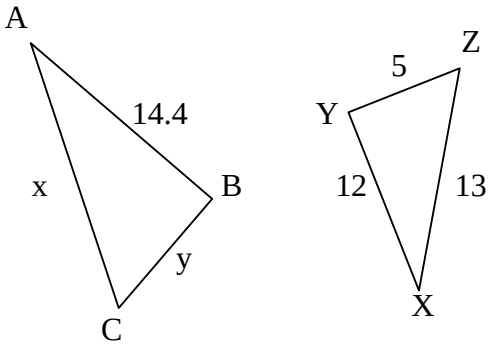
20. $\Delta ABC \sim \Delta XYZ$



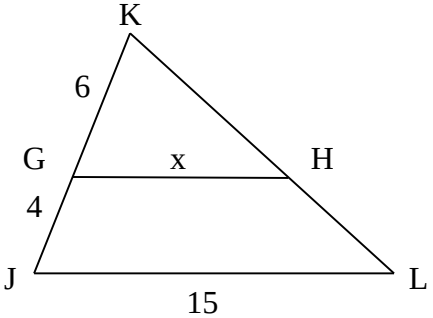
21. $\Delta ABC \sim \Delta XYZ$



22. $\Delta ABC \sim \Delta XYZ$



23. $\Delta JKL \sim \Delta GKH$



24. $\Delta ABC \sim \Delta ADE$