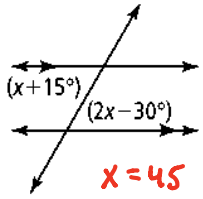
Math 3
Unit 6 Test Review (1)

Name: Key
Date: _____

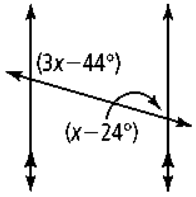
Directions: Find the value of each variable. Then find the measure of each labeled angle.

1.



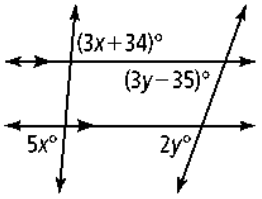
x = 45

2.



x = 62

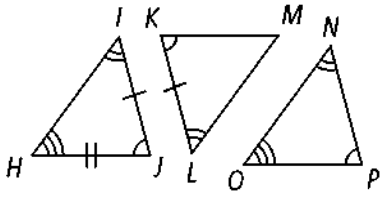
3.



x = 17 y = 35

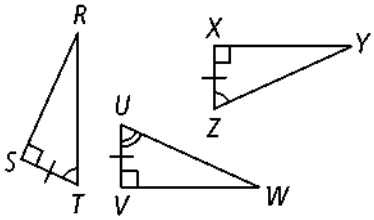
Directions: Name two triangles that are congruent by ASA.

4.



△KLM ≅ △JIH

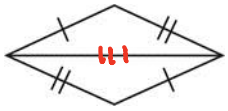
5.



△TSR ≅ △ZXY

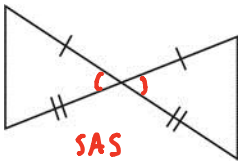
Directions: Would you use SSS or SAS to prove these triangles congruent? If there is not enough information to prove the triangles congruent by SSS or SAS, write *not enough information.* Explain your answer.

6.



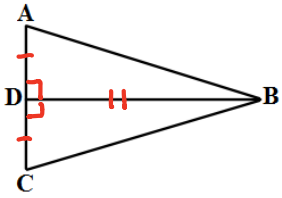
SSS

7.



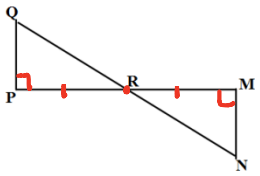
SAS

8. Given: $\overline{BD}$ is the perpendicular bisector of $\overline{AC}$
Prove: $\Delta BAD \cong \Delta BCD$



Statements	Reasons
1) $\overline{BD}$ is the perpendicular bisector of $\overline{AC}$.	1) Given
2) $\overline{AD} \cong \overline{CD}$	2) Definition of segment bisector
3) $\angle ADB$ and $\angle CDB$ are right $\measuredangle$s.	3) Definition of perpendicular
4) ∠ADB ≅ ∠CDB	4) Defn. of Right ∠'s
5) $\overline{DB} \cong \overline{DB}$	5) Reflexive Prop.
6) △BAD ≅ △BCD	6) SAS

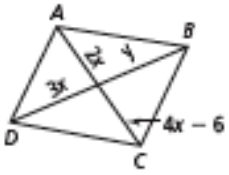
9 Given: $\angle P$ and $\angle M$ are right angles.
R is the midpoint of $\overline{PM}$.
Prove: $\triangle PQR \cong \triangle MNR$



1). $\angle P$ & $\angle M$ are Right $\angle$'s R is the midpoint of $\overline{PM}$	Given
2). $\angle P \cong \angle M$	Defn. of Right $\angle$'s
3). $\overline{PR} \cong \overline{RM}$	Defn. of Midpoint
4). $\angle QRP \cong \angle MRN$	vertical $\angle$'s
5). $\triangle PQR \cong \triangle MNR$	ASA

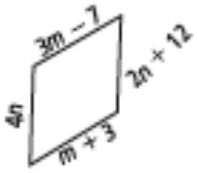
Directions: Find the values of the variables in each parallelogram (14 is a trapezoid)..

10.



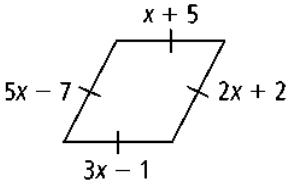
x = 3 y = 9

11.



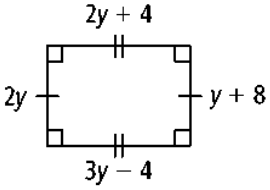
m = 5 n = 6

12.



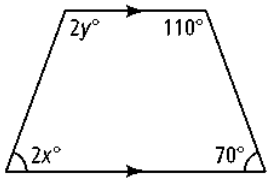
x = 1

13.



y = 8

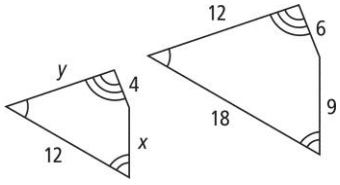
14.



x = 55 y = 35

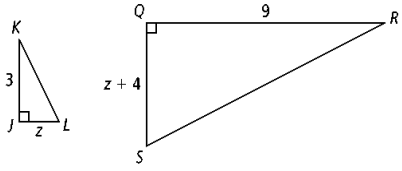
Directions: The polygons are similar. Find the value of each variable.

15.



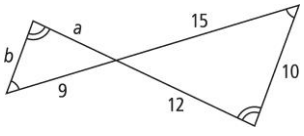
x = 6 y = 8

16.



z = 2

17.



a = 7.2 b = 6