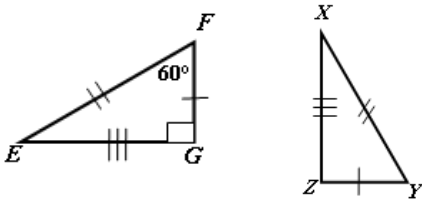


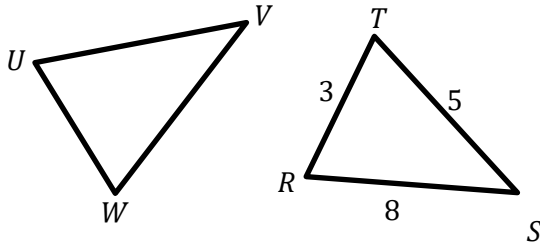
Math 2 Unit 3
Review Worksheet

Name: _____
Date: _____ Per: _____

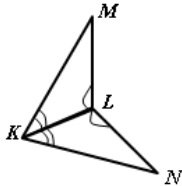
1. Given: $\triangle EFG \cong XYZ$, find $m\angle x$



2. $m\angle R$ and $m\angle W$ are both 35° . $m\angle V$ and $m\angle S$ are both 72° . $\overline{RT} \cong \overline{UW}$. What is the length of \overline{VU} ?



3. To prove $\triangle KLM \cong KLN$, which triangle congruence postulate could you use?



4. Name ALL the corresponding congruent parts given $\triangle RST \cong \triangle FEG$.
Write another congruence statement.

Sides

Angles

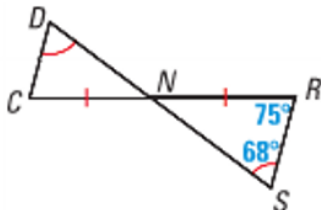
\triangle _____ \cong \triangle _____

5. Choose ALL corresponding \cong statements given $\triangle MON \cong \triangle PQR$

- a. $m\angle M \cong m\angle P$ d. $\triangle NOM \cong \triangle RQP$
b. $\overline{ON} \cong \overline{QR}$ e. $m\angle O \cong m\angle R$
c. $\overline{MN} \cong \overline{PO}$ f. $\triangle ONM \cong \triangle RPQ$

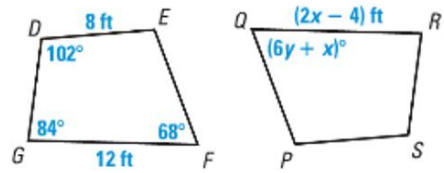
6. In the diagram, what is $m\angle DCN$?

By the definition of congruence, what additional information is needed to know that $\triangle NDC \cong \triangle NSR$?

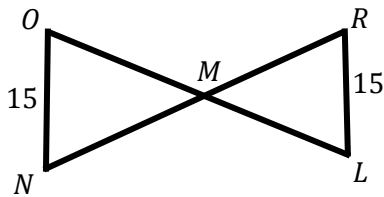


7. In the diagram, $DEFG \cong SPQR$

- Find the value of x .
- Find the value of y .

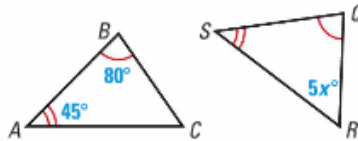


8. Which Postulate, or Theorem can be used to determine $m\angle R$, given $m\angle O \cong m\angle L$?



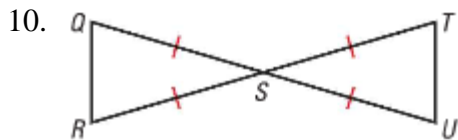
_____ Postulate or Theorem to Prove $\triangle's \cong$
 _____ Postulate or Theorem to Prove $m\angle R \cong m\angle N$

9. Find the value of x .

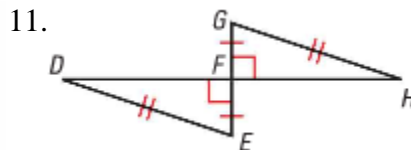


[10-18]

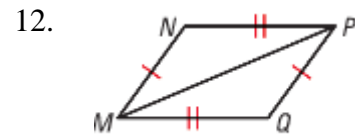
A) Choose the postulate or theorem you would use to prove each pair of triangles congruent.
 B) Write a Congruence Statement. If there is not enough information, write not enough information.



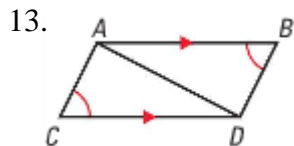
A. _____
 B. _____



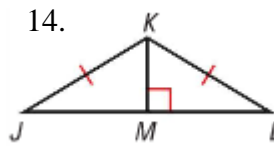
A. _____
 B. _____



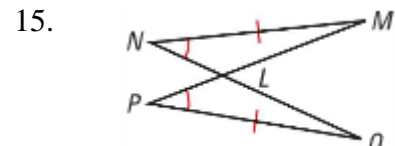
A. _____
 B. _____



A. _____
 B. _____

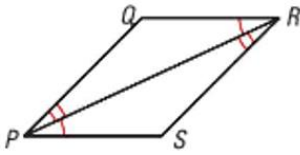


A. _____
 B. _____



A. _____
 B. _____

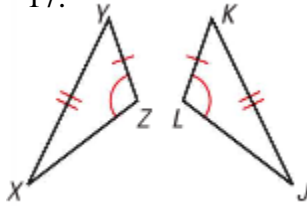
16.



A. _____

B. _____

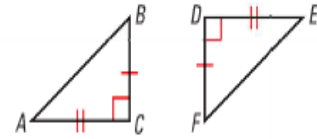
17.



A. _____

B. _____

18.



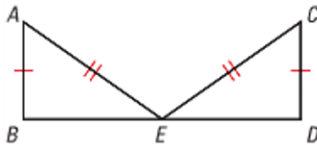
A. _____

B. _____

[19-21] Write a two-column proof.

19. Given: $\overline{AE} \cong \overline{CE}$, $\overline{AB} \cong \overline{CD}$, E is the midpoint of \overline{BD} .

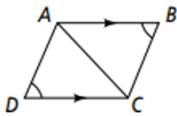
Prove: $\triangle EAB \cong \triangle ECD$



Statements	Reasons
1)	1) Given
2)	2) Given
3)	3) Definition of Midpoint
4) $\triangle EAB \cong \triangle ECD$	4)

20. Given: $\overline{AB} \parallel \overline{DC}$, $\angle B \cong \angle D$

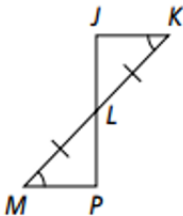
Prove: $\overline{BC} \cong \overline{DA}$



Statements	Reasons
1) $\overline{AB} \parallel \overline{DC}$, $\angle B \cong \angle D$	1) Given
2) $m\angle BAC \cong m\angle ACD$	2)
3)	3) Reflexive
4) $\triangle ACB \cong \triangle CAD$	4)
5) $\overline{BC} \cong \overline{DA}$	5)

21. Given: $\angle K \cong \angle M$, $\overline{KL} \cong \overline{ML}$

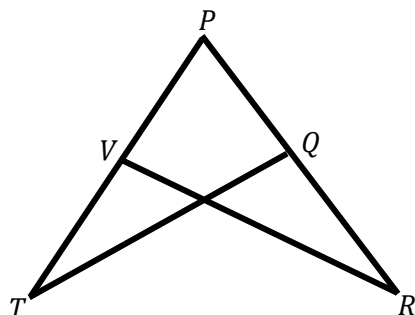
Prove: $\triangle JKL \cong \triangle PML$



Statements	Reasons

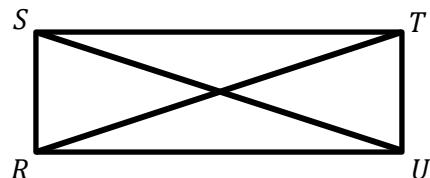
22. Name a common angle for $\triangle TPQ$ and $\triangle RPV$

- a. $\angle PTQ$
- b. $\angle PRV$
- c. $\angle PQT$
- d. $\angle TPQ$



23. Name a common side for $\triangle RST$ and $\triangle UTS$

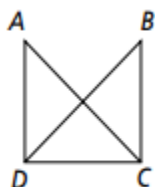
- a. \overline{RS}
- b. \overline{TU}
- c. \overline{RU}
- d. \overline{ST}



[24-25] A) Name a pair of overlapping congruent triangles.

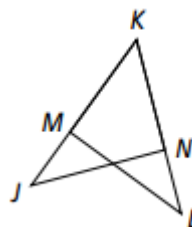
B) State whether they are congruent by SSS, SAS, ASA, AAS or HL.

24. Given: $\overline{AD} \cong \overline{BC}$ and $\angle ADC \cong \angle BCD$



A) $\triangle DAC \cong \triangle$ _____ B) _____

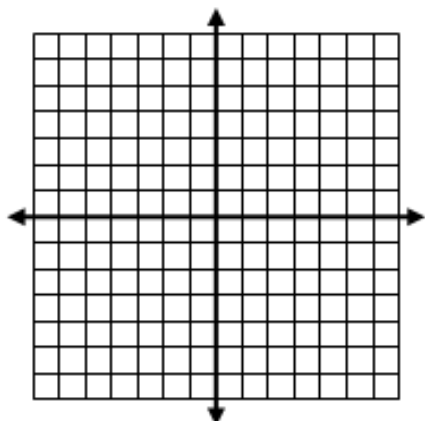
25. Given: $\overline{JK} \cong \overline{KL}$ and $\overline{KN} \cong \overline{KM}$



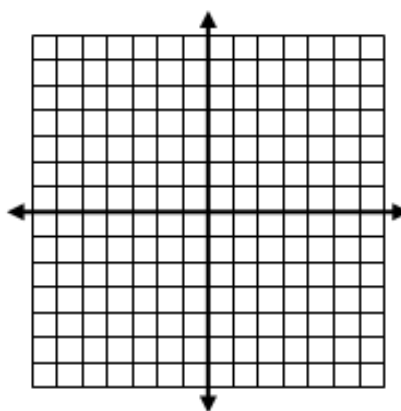
A) $\triangle MKL \cong \triangle$ _____ B) _____

[26-27] Transformation Practice

26. Graph a \triangle whose vertices have the coordinates A(3, -1); B(5, -1) and C(4, -3)
Reflect over the y -axis and name it $A'B'C'$

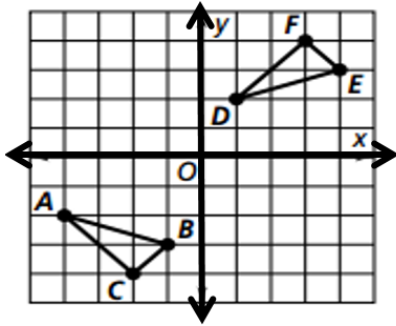


27. Graph a \triangle whose vertices have the coordinates A(-2, 1); B(-4, 3) and C(-4, -1)
Rotate 90° clockwise then
Translate $(x + 2, y - 1)$ name it $A'B'C'$

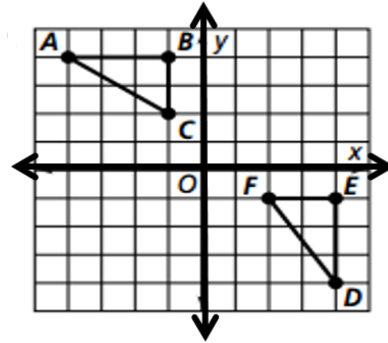


[28-31] Write a congruence statement for the two figures in each coordinate grid. Then write a congruence transformation that maps one figure to the other.

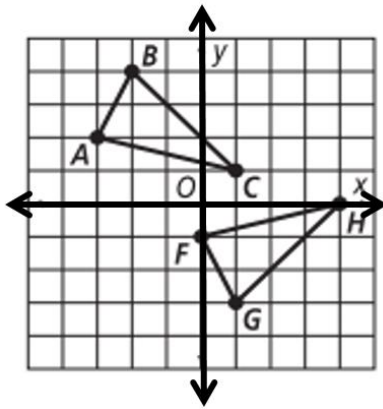
28. Map $\triangle ABC$ to $\triangle DEF$



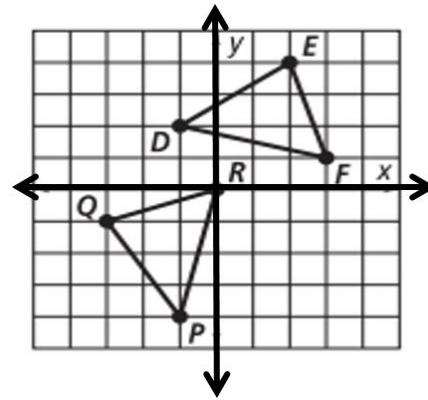
29. Map $\triangle ABC$ to $\triangle DEF$



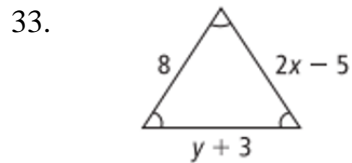
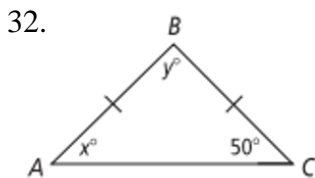
30. Map $\triangle ABC$ to $\triangle FGH$



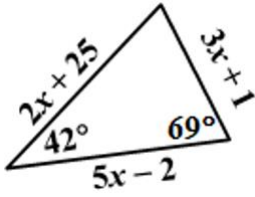
31. Map $\triangle DEF$ to $\triangle PQR$



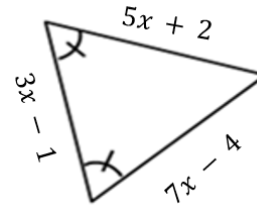
[32-36] Solve for x and y .



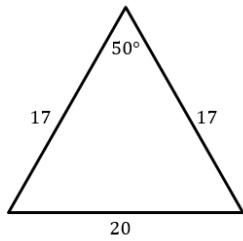
35.



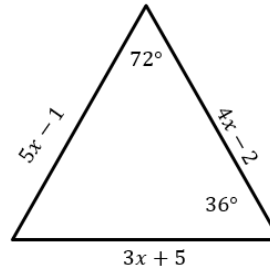
36.



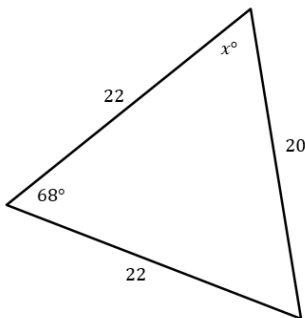
37. What is the measure of the base angles?



38. Find the value of x .



39. Find the value of x .



40. Find the value of x .

