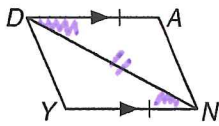


Congruent Triangle Review

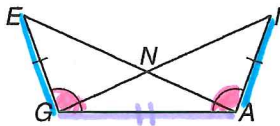
Directions: Answer the questions below. Use the figure to help answer the questions.

1. Which shortcut proves the triangles congruent? SAS (Show the Geometry below)



S: $AD \cong YN$ Given
 A: $\angle ADN \cong \angle YND$ // lines form \cong alt. int. \angle s
 S: $DN \cong DN$ Reflexive

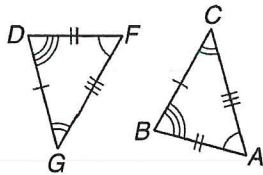
2. Which shortcut proves the triangles congruent? SAS (Show the Geometry below)



S: $EA \cong EG$ (Given)
 A: $\angle EGA \cong \angle GNA$ (Given)
 S: $GA \cong GA$ (Reflexive)

3. If $\triangle TGS \cong \triangle KEL$, which angle in $\triangle KEL$ corresponds to $\angle T$? $\angle K$

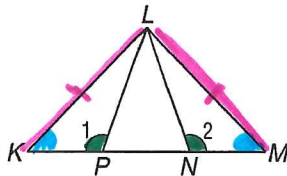
4. Identify the congruent triangles and name their corresponding congruent angles.



Congruent Triangles: $\triangle ABC \cong \triangle FDG$

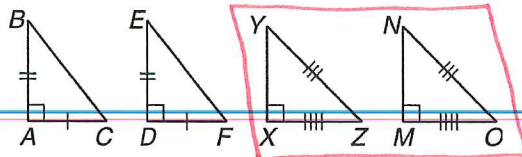
Congruent Angles: $\angle A \cong \angle F$, $\angle C \cong \angle G$, $\angle D \cong \angle B$

5. $\triangle KLM$ is an isosceles triangle and $\angle 1 \cong \angle 2$. Name the postulate that could be used to prove $\triangle LKP \cong \triangle LMN$. Choose from SSS, SAS, ASA, and AAS. Show the Geometry as well.

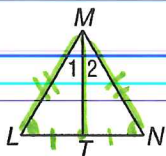


S: $LK \cong LM$ def of isos. \triangle
 A: $\angle M \cong \angle K$ base \angle s of isos \triangle are \cong .
 A: $\angle 1 \cong \angle 2$ given.

6. Without finding any other angles or sides congruent, circle the pair of triangles can be proved to be congruent by the HL Theorem.

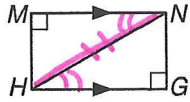


7. If $\triangle LMN$ is isosceles and T is the midpoint of LN, which shortcut can be used to prove $\triangle MLT \cong \triangle MNT$? Show the Geometry as well.



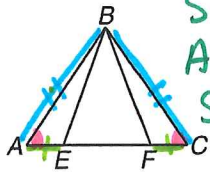
SSS OR SAS
 OR
 HL

8. Which triangles are congruent in the figure below? (Write out the congruence statement) AAS $\triangle MNH \cong \triangle GHN$



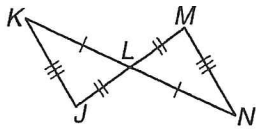
$\angle M = 90^\circ$, $\angle G = 90^\circ$ so $\angle M \cong \angle G$ (subs)
 $\angle MNH \cong \angle GHN$ (|| lines form \cong alt. int \angle s)
 $HN \cong HN$ (Reflexive)

9. If $\triangle ABC$ is isosceles and $AE \cong FC$, which theorem or postulate can be used to prove $\triangle AEB \cong \triangle CFB$? Show the Geometry as well.



S: $AB \cong BC$ def of iso. \triangle
 A: $\angle A \cong \angle C$ base \angle s of isos. \triangle are \cong
 S: $AE \cong FC$ given. SAS

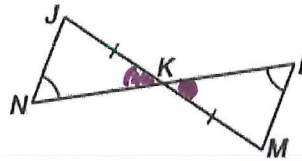
10. Which triangles are congruent in the figure? (Write out the congruence statement) $\triangle K LJ \cong \triangle NLM$



11. If $\triangle DJL \cong \triangle EGS$, which segment in $\triangle EGS$ corresponds to DL ? ES

12. Given: $\angle N \cong \angle L$
 $\overline{JK} \cong \overline{MK}$

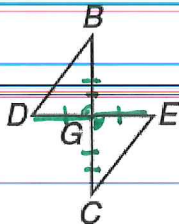
Prove: $\triangle JKN \cong \triangle MKL$



1. $\angle N \cong \angle L$, $\overline{JK} \cong \overline{MK}$	1. given
2. $\angle JKN \cong \angle MKL$	2. vertical \angle s are \cong
3. $\triangle JKN \cong \triangle MKL$	3. AAS

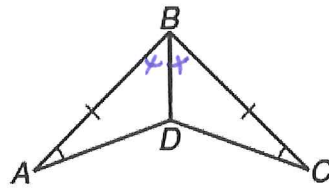
13. Given: \overline{DE} and \overline{BC} bisect each other.

Prove: $\triangle DGB \cong \triangle EGC$



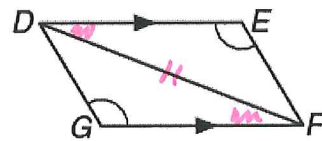
1. DE and BC bisect each other.	1. Given
2. $BG \cong CG$ $DG \cong EG$	2. def of segment bisector.
3. $\angle BGD \cong \angle CGE$	3. vertical \angle s are \cong
4. $\triangle DGB \cong \triangle EGC$	4. SAS

14. **Given:** $\overline{AB} \cong \overline{CB}$
 $\angle A \cong \angle C$
 \overline{DB} bisects $\angle ABC$.
Prove: $\overline{AD} \cong \overline{CD}$



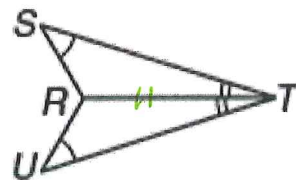
- | | |
|---|---|
| <p>1. $AB \cong CB, \angle A \cong \angle C$
 DB Bisects $\angle ABC$</p> <p>2. $\angle ABD \cong \angle CBD$</p> <p>3. $\triangle ABD \cong \triangle CBD$</p> <p>4. $AD \cong CD$</p> | <p>1. given</p> <p>2. def of \angle bisector</p> <p>3. ASA</p> <p>4. c.p.c.t.c</p> |
|---|---|

15. **Given:** $\overline{DE} \parallel \overline{FG}$
 $\angle E \cong \angle G$
Prove: $\triangle DFG \cong \triangle FDE$



- | | |
|--|---|
| <p>1. $DE \parallel FG, \angle E \cong \angle G$</p> <p>2. $\angle EDF \cong \angle GFD$</p> <p>3. $DF \cong DF$</p> <p>4. $\triangle DFG \cong \triangle FDE$</p> | <p>1. given</p> <p>2. \parallel lines form \cong alt. int. \angles</p> <p>3. Reflexive</p> <p>4. AAS</p> |
|--|---|

16. **Given:** $\angle S \cong \angle U; \overline{TR}$ bisects $\angle STU$.
Prove: $\angle SRT \cong \angle URT$

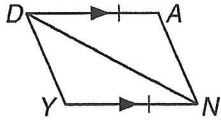


- | | |
|--|--|
| <p>1. $\angle S \cong \angle U, \overline{TR}$ bisects
 $\angle STU$</p> <p>2. $\angle STR \cong \angle UTR$</p> <p>3. $RT \cong RT$</p> <p>4. $\triangle SRT \cong \triangle URT$</p> <p>5. $\angle SRT \cong \angle URT$</p> | <p>1. given</p> <p>2. def of \angle bisector</p> <p>3. Reflexive</p> <p>4. AAS</p> <p>5. c.p.c.t.c.</p> |
|--|--|

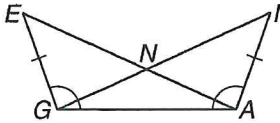
Congruent Triangle Review

Directions: Answer the questions below. Use the figure to help answer the questions.

1. Which shortcut proves the triangles congruent? _____ (Show the Geometry below)



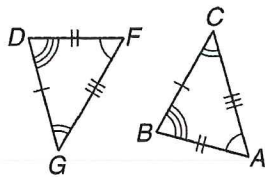
2. Which shortcut proves the triangles congruent? _____ (Show the Geometry below)



3. If $\triangle TGS \cong \triangle KEL$, which angle in $\triangle KEL$ corresponds to $\angle T$? _____

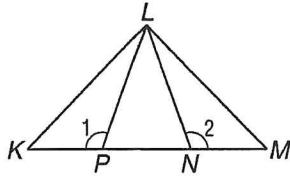
4. Identify the congruent triangles and name their corresponding congruent angles.

Congruent Triangles: $\triangle ABC$

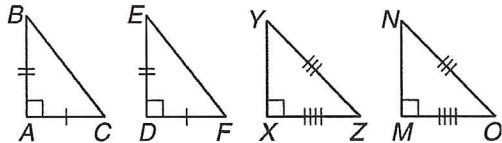


Congruent Angles: _____

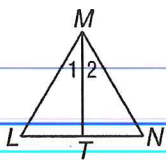
5. $\triangle KLM$ is an isosceles triangle and $\angle 1 \cong \angle 2$. Name the postulate that could be used to prove $\triangle LKP \cong \triangle LMN$. Choose from SSS, SAS, ASA, and AAS. Show the Geometry as well.



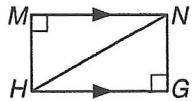
6. Without finding any other angles or sides congruent, circle the pair of triangles can be proved to be congruent by the HL Theorem.



7. If $\triangle LMN$ is isosceles and T is the midpoint of LN , which shortcut can be used to prove $\triangle MLT \cong \triangle MNT$? Show the Geometry as well.

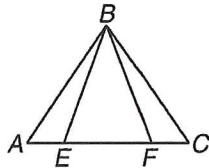


8. Which triangles are congruent in the figure below? (Write out the congruence statement)

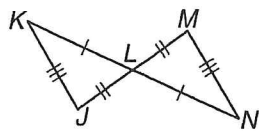


$\triangle MNH \cong \triangle$ _____

9. If $\triangle ABC$ is isosceles and $AE \cong FC$, which theorem or postulate can be used to prove $\triangle AEB \cong \triangle CFB$? Show the Geometry as well.

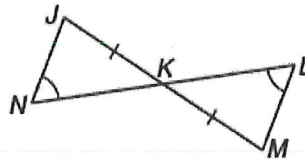


10. Which triangles are congruent in the figure? (Write out the congruence statement) $\triangle K LJ \cong$ _____

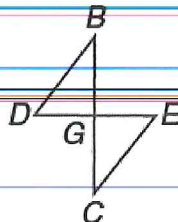


11. If $\triangle DJL \cong \triangle EGS$, which segment in $\triangle EGS$ corresponds to DL ? _____

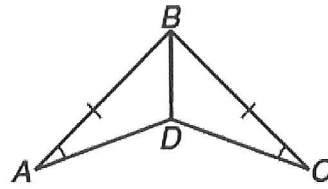
12. **Given:** $\angle N \cong \angle L$
 $\overline{JK} \cong \overline{MK}$
Prove: $\triangle JKN \cong \triangle MKL$



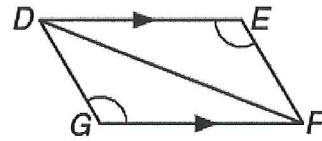
13. **Given:** \overline{DE} and \overline{BC} bisect each other.
Prove: $\triangle DGB \cong \triangle EGC$



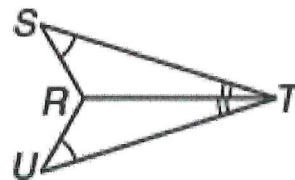
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 $\angle E \cong \angle G$
Prove: $\triangle DFG \cong \triangle FDE$



16. **Given:** $\angle S \cong \angle U$; \overline{TR} bisects $\angle STU$.
Prove: $\angle SRT \cong \angle URT$

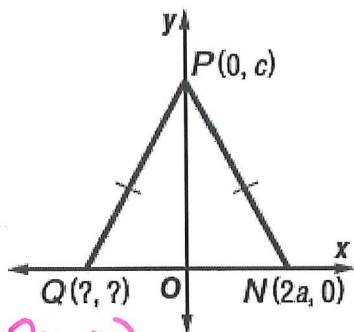


Names: _____

Key

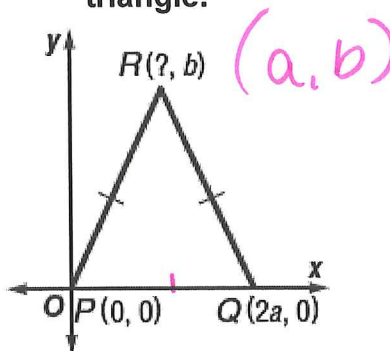
Rally Coach Review from 4.7

1.) Name the missing coordinates in each triangle.



$(-2a, 0)$

2.) Name the missing coordinates in each triangle.

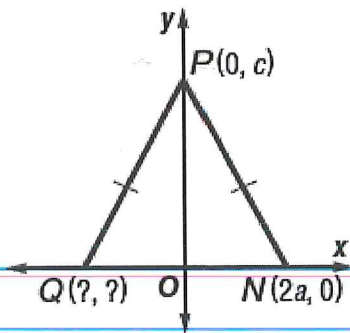


(a, b)

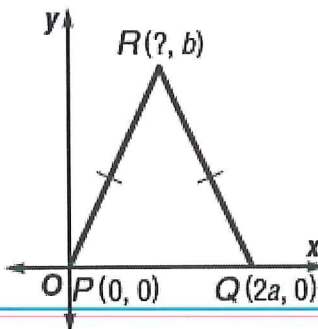
Names: _____

Rally Coach Review from 4.7

1.) Name the missing coordinates in each triangle.



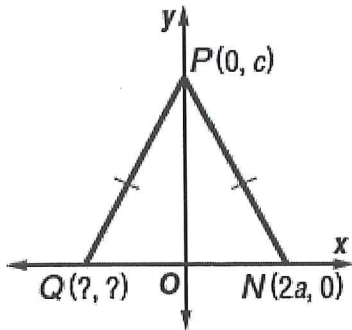
2.) Name the missing coordinates in each triangle.



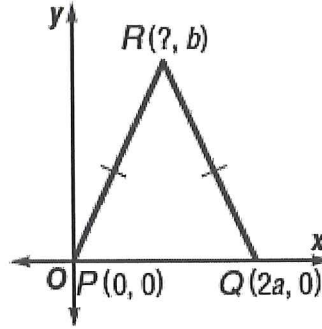
Names: _____

Rally Coach Review from 4.7

1.) Name the missing coordinates in each triangle.



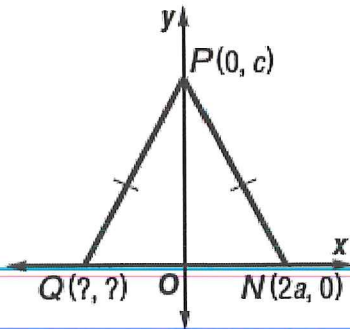
2.) Name the missing coordinates in each triangle.



Names: _____

Rally Coach Review from 4.7

1.) Name the missing coordinates in each triangle.



2.) Name the missing coordinates in each triangle.

