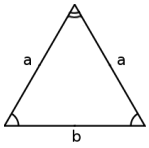
NAME _____ DATE _____ PERIOD _____

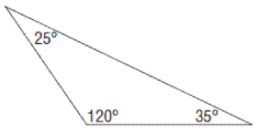
REVIEW Unit 2 Test congruent triangles

Classify each triangle. Choose all that apply.

1.



2.



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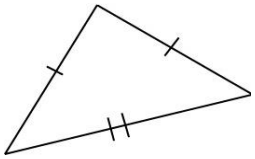
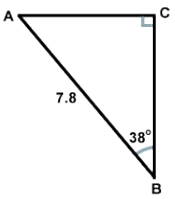
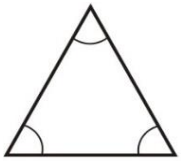


A. right
B. acute
C. obtuse
D. equiangular
E. isosceles
E. congruent
F. equilateral

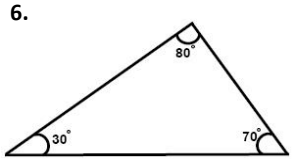
4.



5.

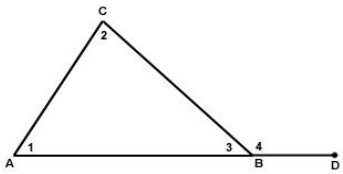


6.

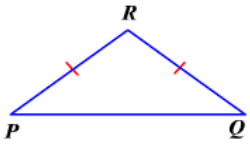


Identify.

7. remote interior angles of ∠4

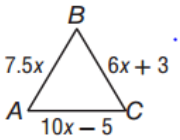


8. vertex angle and base angles

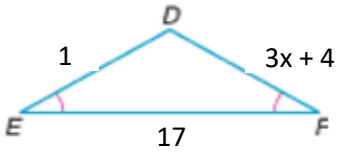


Find each requested value.

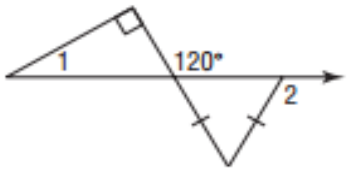
9. If ABC is equilateral, find the length of the



10. Find x.



11. Find the m∠1 and m∠2.

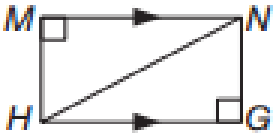


Answer the questions about corresponding parts of congruent triangles.

12. If ΔTGS ≅ ΔKEL, which angle in ΔKEL correspond to ∠T?

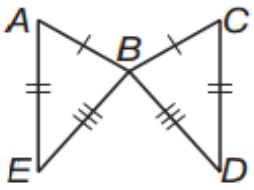
13. If ΔTGS ≅ ΔKEL, which segment in ΔTGS correspond to EK?

14. Write a congruence statement for the triangles in t

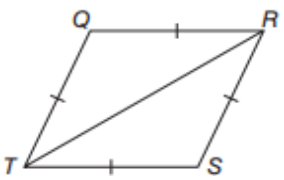


15. Based on your answer to the last question, which segment is congruent to NG?

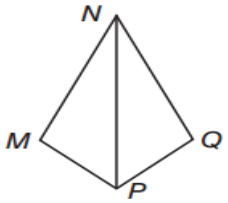
16. What are the congruent triangles in the diagram?



17. The rhombus QRST is made up of 2 congruent isosceles triangles. Given m∠QRS = 34, what is the

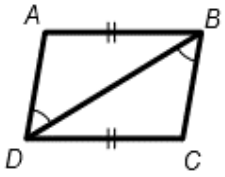


18. Quadrilateral MNQP is made of two congruent triangles. NP bisects ∠N and ∠P. In the quadrilateral, m∠N = 38° and m∠P = 104°. What is the measure of ∠Q?



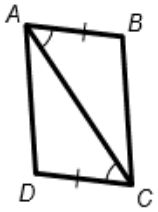
Determine if the triangles are congruent. Write the triangle congruence statements and name the postulate or theorem used. If not, write not enough infor

19.

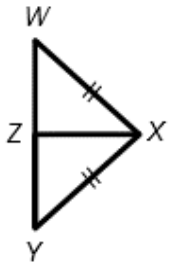


If AB ||CD.

20.

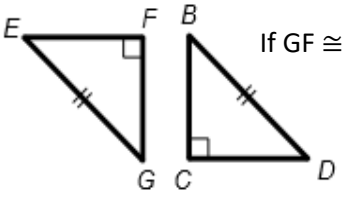


21.



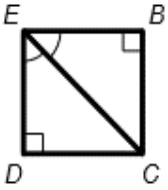
If Z is midpoint of WY.

22.



If GF ≅ BC.

23.



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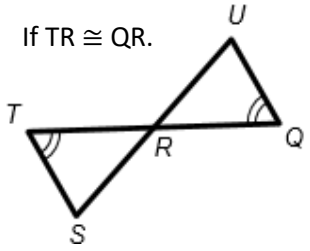
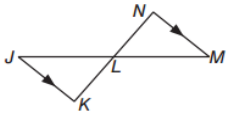


If TR ≅ QR.

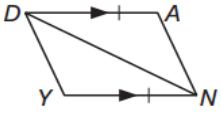
Fill in the missing reasons.

25. **Given:** L is the midpoint of $\overline{JM}$.
$\overline{JK} \parallel \overline{NM}$
Prove: $\triangle JKL \cong \triangle MNL$
Proof:



Statements	Reasons
1. L is the midpoint of $\overline{JM}$.	1. Given
2. _____	2. Definition of midpoint
3. $\overline{JK} \parallel \overline{MN}$	3. Given
4. $\angle JKL \cong \angle MNL$	4. _____
5. _____	5. _____
6. $\triangle JKL \cong \triangle MNL$	6. _____

26. **Given:** $\overline{DA} \parallel \overline{YN}$
$\overline{DA} \cong \overline{YN}$
Prove: $\angle NDY \cong \angle DNA$
Proof:

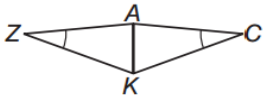


Statements	Reasons
1. $\overline{DA} \parallel \overline{YN}$	1. Given
2. _____	2. Alt. int. ∡s are ≅.
3. $\overline{DA} \cong \overline{YN}$	3. Given
4. _____	4. Reflexive Property
5. $\triangle NDY \cong \triangle DNA$	5. _____
6. $\angle NDY \cong \angle DNA$	6. _____

Write 2 column proofs for the following.

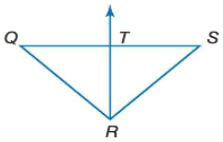
27.

Given: $\angle Z \cong \angle C$
$\overline{AK}$ bisects $\angle ZKC$.
Prove: $\triangle AKZ \cong \triangle AKC$



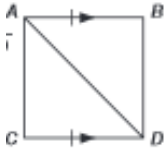
28.

Given: $\triangle QRS$ is isosceles with $\overline{QR} \cong \overline{SR}$.
$\overline{RT}$ bisects $\overline{QS}$ at point T.
Prove: $\triangle QRT \cong \triangle SRT$



29.

Given: $AB = CD, \overline{AB} \parallel \overline{CD}$
Prove: $\triangle ACD \cong \triangle CAB$



30.

Given: $\overline{CD}$ bisects $\overline{AE}$, $\overline{AB} \parallel \overline{CD}$
$\angle E \cong \angle BCA$
Prove: $\triangle ABC \cong \triangle CDE$