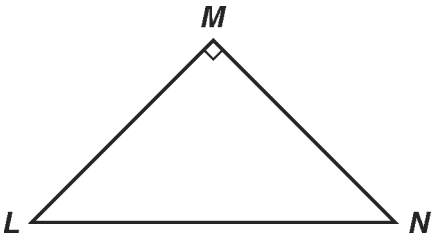
Unit 4 Practice Test: Triangles

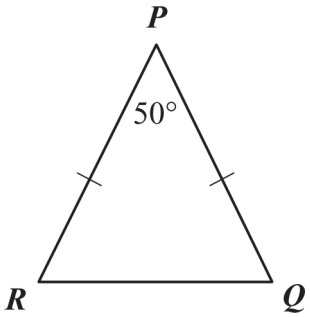
Name: _____ **Date:** _____

1. 

Triangle *LMN* is a right triangle, and angles *L* and *N* are equal. What is the measure of angle *L*?

A. 25° B. 45° C. 70° D. 90°

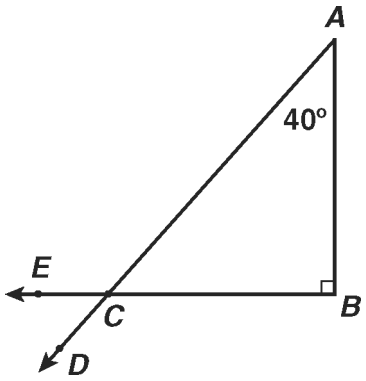
2. In $\triangle PQR$ shown below, $\overline{PR} \cong \overline{PQ}$ and $m\angle P = 50°$.



What is $m\angle Q$?

A. 25° B. 50° C. 65° D. 80°

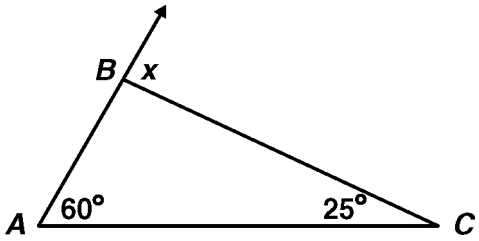
3. In the figure below, $\triangle ABC$ is a right triangle and $m\angle A = 40°$.



What is $m\angle ECD$?

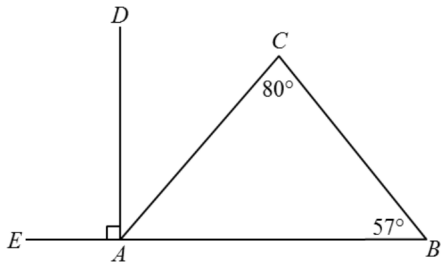
A. 40° B. 50° C. 130° D. 140°

4. What is $m\angle x$?



A. 35° B. 60° C. 85° D. 95°

5. In the figure below, what is $m\angle DAC$?



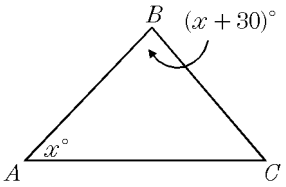
A. 47° B. 57° C. 90° D. 137°

6. In the accompanying diagram of isosceles triangle ABC, $\overline{AB} \cong \overline{BC}$, $m\angle BAC = x$, and $m\angle ABC = x + 30$.

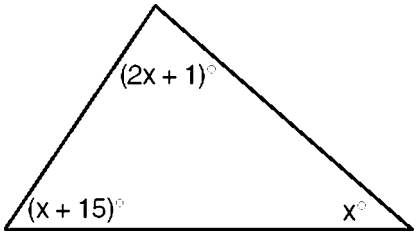
What is the value of x?

A. 80 B. 75

C. 50 D. 30

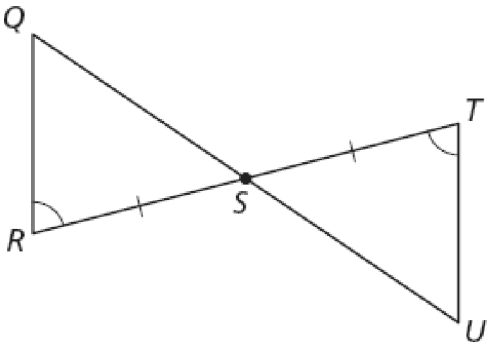


7. What is the measure of the largest angle in the accompanying triangle?



A. 41 B. 46.5 C. 56 D. 83

8. In the diagram below, $\overline{RT}$ intersects $\overline{QU}$ at point S.

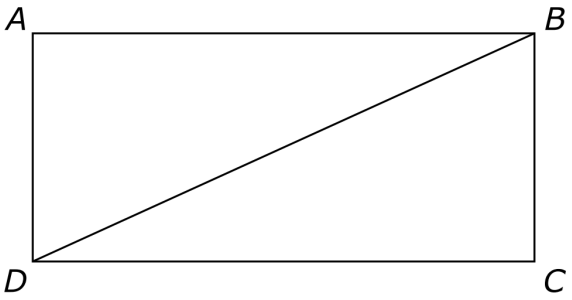


Which postulate should be used to prove that $\triangle RQS \cong \triangle TUS$?

A. Side–Side–Side B. Angle–Side–Angle

C. Angle–Side–Side D. Side–Angle–Side

9. Quadrilateral $ABCD$ is shown below.



If $\overline{AB} \parallel \overline{CD}$ and $\overline{AB} \cong \overline{CD}$, which is a reason for $\triangle ABD \cong \triangle CDB$?

A. Side-Angle-Side Postulate

B. Angle-Angle Postulate

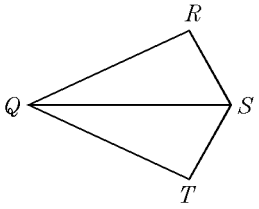
C. Hypotenuse-Leg Theorem

D. Angle-Angle-Side Theorem

10. In the accompanying diagram of quadrilateral $QRST$, $\overline{RS} \cong \overline{ST}$, $\overline{SR} \perp \overline{QR}$, and $\overline{ST} \perp \overline{QT}$. Which method of proof may be used to prove $\triangle QRS \cong \triangle QTS$?

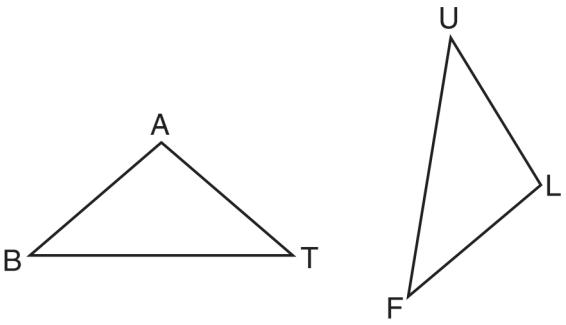
A. HL B. SAS

C. AAS D. ASA



11. In the accompanying diagram of triangles BAT and FLU, $\angle B \cong \angle F$ and $\overline{BA} \cong \overline{FL}$.

Which statement is needed to prove $\triangle BAT \cong \triangle FLU$?



A. $\angle A \cong \angle L$ B. $\overline{AT} \cong \overline{LU}$

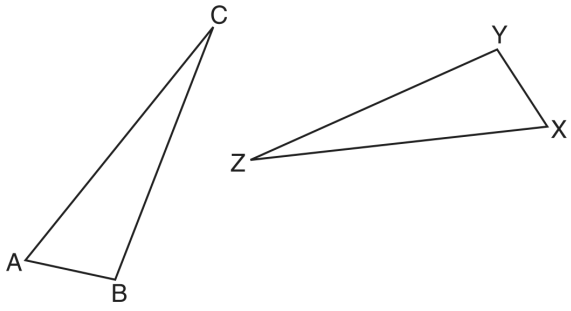
C. $\angle A \cong \angle U$ D. $\overline{BA} \parallel \overline{FL}$

12. If $\triangle JKL \cong \triangle MNO$, which statement is always true?

A. $\angle KLJ \cong \angle NMO$ B. $\angle KJL \cong \angle MON$

C. $\overline{JL} \cong \overline{MO}$ D. $\overline{JK} \cong \overline{ON}$

13. In the diagram below, $\triangle ABC \cong \triangle XYZ$.

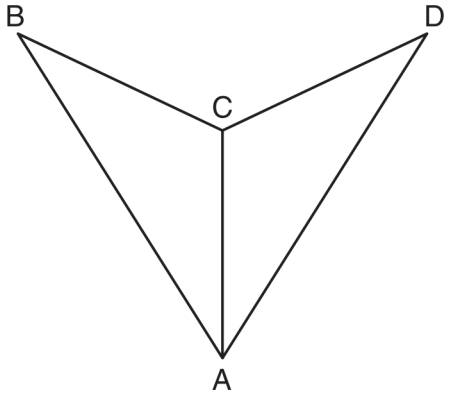


Which statement must be true?

A. $\angle C \cong \angle Y$ B. $\angle A \cong \angle X$

C. $\overline{AC} \cong \overline{YZ}$ D. $\overline{CB} \cong \overline{XZ}$

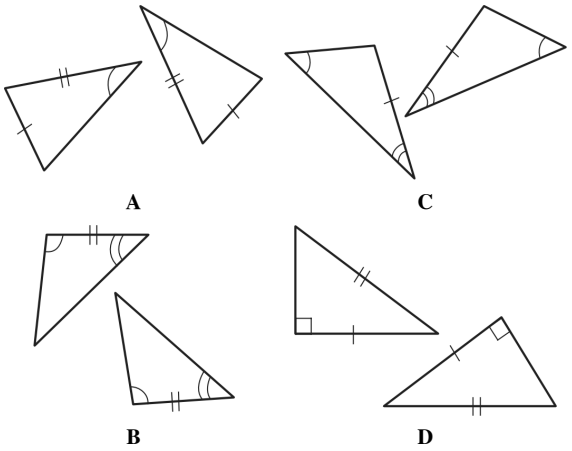
14. As shown in the diagram below, $\overline{AC}$ bisects $\angle BAD$ and $\angle B \cong \angle D$.



Which method could be used to prove $\triangle ABC \cong \triangle ADC$?

A. SSS B. AAA C. SAS D. AAS

15. In the diagram below, four pairs of triangles are shown. Congruent corresponding parts are labeled in each pair.



Using only the information given in the diagrams, which pair of triangles can *not* be proven congruent?

A. A B. B C. C D. D

Unit 4 Practice Test: Triangles 11/1/2019

1.
Answer: B
Points: 1

2.
Answer: C
Objective: MA 10.G.6
Points: 1

3.
Answer: B
Points: 1

4.
Answer: C
Points: 1

5.
Answer: A
Points: 1

6.
Answer: C
Points: 1

7.
Answer: D
Points: 1

8.
Answer: B
Points: 1

9.
Answer: A
Points: 1

10.
Answer: A
Points: 1

11.
Answer: A
Points: 1

12.
Answer: C
Points: 1

13.
Answer: B
Points: 1

14.
Answer: D
Points: 1

15.
Answer: A
Points: 1