

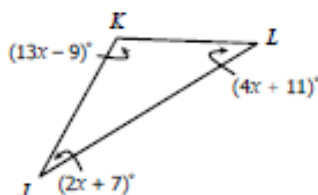
Geometry Review

QUIZ 3

Name: _____

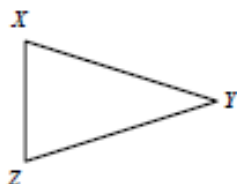
Date: _____ Per: _____

1. Given $\triangle JKL$, find $m\angle L$.



- A. 43°
 B. 47°
 C. 52°
 D. 55°

2. Given $\triangle XYZ$, if $\overline{XY} \cong \overline{YZ}$, and $m\angle Y = 22^\circ$, find $m\angle Z$.



$m\angle Z =$

3. Which of the following side lengths could form a triangle? Check all that apply.

7, 7, 15

16, 3, 8

21, 24, 43

10, 21, 11

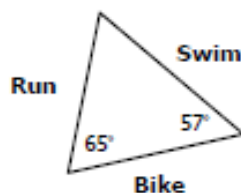
16, 14, 9

32, 35, 39

4. Jasmine is making a triangular garden. Two sides of the garden measure 6 feet by 11 feet. What is the range of possible lengths, in feet, for the third side, x , of the garden?

$< x <$

5. A triathlon event in which participants run, bike, and swim certain distances is mapped out in a triangle as shown below.



Which statement must be true?

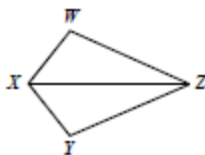
- A. The run distance is greater than the swim distance.
 B. The bike distance is less than the run distance.
 C. The swim distance is less than the bike distance.
 D. The bike distance is greater than the run distance.
6. In $\triangle DEF$, $DE = 29$ feet, $EF = 26$ feet, and $DF = 32$ feet. Which correctly gives the order of the angle measures from largest to smallest?

- A. $\angle E, \angle F, \angle D$
 B. $\angle F, \angle D, \angle E$
 C. $\angle D, \angle F, \angle E$
 D. $\angle E, \angle D, \angle F$

7. If $\triangle CMD \cong \triangle RMY$, what must be true?

- A. $m\angle C = m\angle Y$
 B. $m\angle D = m\angle R$
 C. $CD = RY$
 D. $MD = RW$

8. Given: \overline{XZ} bisects $\angle WXY$ and $\angle WZY$.



Based on the information given, which triangle congruence theorem could be used to prove $\triangle WXZ \cong \triangle YXZ$?

- A. Side-Angle-Side C. Angle-Angle-Side
 B. Angle-Side-Angle D. Side-Side-Side

9. Which pair of triangles cannot be proved congruent?

A.



B.



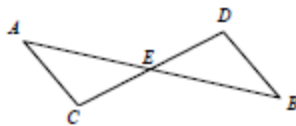
C.



D.

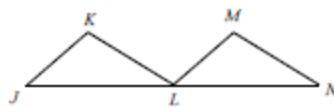


10. What piece of information would prove $\triangle ACE \cong \triangle BDE$ by Side-Angle-Side?



- A. \overline{E} bisects \overline{AB} and \overline{CD} C. $\overline{AC} \cong \overline{DB}$
 B. $\overline{AC} \parallel \overline{DB}$ D. $\angle ACE \cong \angle BDE$

11. Given: $\overline{JK} \parallel \overline{LM}$, $\overline{KL} \parallel \overline{MN}$, $\overline{JK} \cong \overline{LM}$



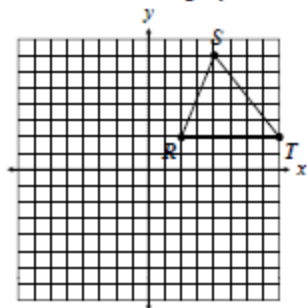
Complete the proof of $\triangle JKL \cong \triangle LMN$ by writing the letter of the reason in the box. Reasons may be used more than once. Not all reasons will be used.

| Statements | Reasons |
|--|---------|
| 1. $\overline{JK} \parallel \overline{LM}$, $\overline{KL} \parallel \overline{MN}$ | 1. |
| 2. $\angle KJL \cong \angle MLN$; $\angle KLJ \cong \angle MNL$ | 2. |
| 3. $\overline{JK} \cong \overline{LM}$ | 3. |
| 4. $\triangle JKL \cong \triangle LMN$ | 4. |

Reasons Bank:

- A. Given
 B. Reflexive Property
 C. Alternate Interior Angles
 D. Corresponding Angles
 E. Angle-Side-Angle
 F. Angle-Angle-Side

12. $\triangle RST$ is shown on the graph below.



Which set of ordered pairs could represent the vertices of a triangle congruent to $\triangle RST$?

- A. $\{(1, -1), (7, -1), (4, -6)\}$
 B. $\{(-7, 5), (-2, 8), (-2, 1)\}$
 C. $\{(-6, -1), (-1, -5), (-6, -7)\}$
 D. $\{(-3, 0), (3, 0), (-1, -6)\}$

