# Geometry Chapter Tests

## Practice Test

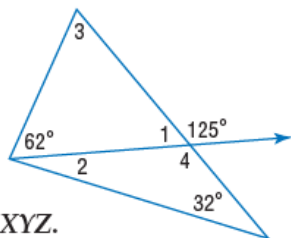Classify each triangle as *acute, equiangular, obtuse,* or *right.*
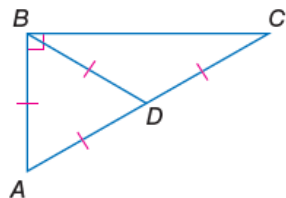


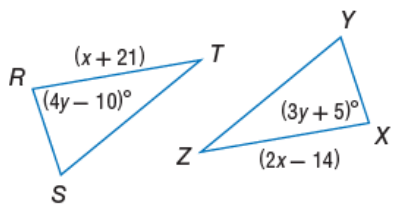**1.** △ABD     **2.** △ABC     **3.** △BDC

Find the measure of each numbered angle.

**4.** ∠1     **5.** ∠2

**6.** ∠3     **7.** ∠4



In the diagram, △RST ≅ △XYZ.



**8.** Find $x$.

**9.** Find $y$.

**12.** Determine whether $\triangle TJD \cong \triangle SEK$ given $T(-4, -2)$, $J(0, 5)$, $D(1, -1)$, $S(-1, 3)$, $E(3, 10)$, and $K(4, 4)$. Explain.

Determine which postulate or theorem can be used to prove each pair of triangles congruent. If it is not possible to prove them congruent, write *not possible.*
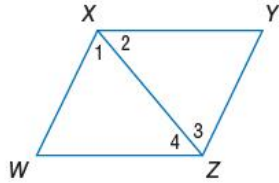
**13.**



**14.**



**15.**



**16.**

**17. LANDSCAPING** Angie has laid out a design for a garden consisting of two triangular areas as shown below. The points are $A(0, 0)$, $B(0, 5)$, $C(3, 5)$, $D(6, 5)$, and $E(6, 0)$. Name the type of congruence transformation for the preimage $\triangle ABC$ to $\triangle EDC$.

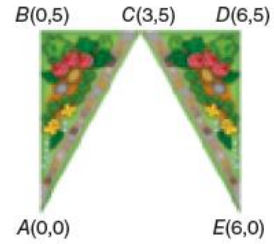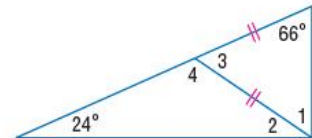B(0,5)    C(3,5)    D(6,5)

A(0,0)              E(6,0)
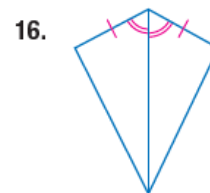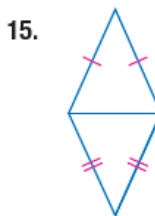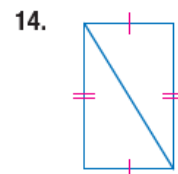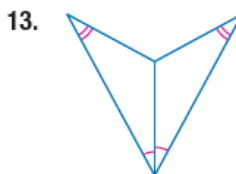
**10. PROOF** Write a flow proof.

**Given:** $\overline{XY} \parallel \overline{WZ}$ and $\overline{XW} \parallel \overline{YZ}$

**Prove:** $\triangle XWZ \cong \triangle ZYX$

X          Y

2
1

4  3

W          Z

**Find the measure of each numbered angle.**

**18.** $\angle 1$

**19.** $\angle 2$

66°

3
4

24°

2   1

**11. MULTIPLE CHOICE** Find $x$.



A  36

B  32

C  28
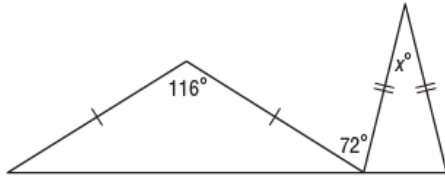
D  22

**20. PROOF** $\triangle ABC$ is a right isosceles triangle with hypotenuse $\overline{AB}$. $M$ is the midpoint of $\overline{AB}$. Write a coordinate proof to show that $\overline{CM}$ is perpendicular to $\overline{AB}$.

**315**