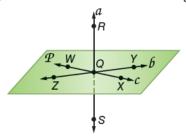
Geometry Chapter Tests

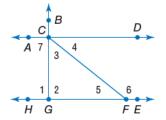
Practice Test

Use the figure to name each of the following.



- 1. the line that contains points Q and Z
- **2.** two points that are coplanar with points *W*, *X*, and *Y*
- **3.** the intersection of lines a and b

For Exercises 15-18, use the figure below.



- **15.** Name the vertex of $\angle 3$.
- **16.** Name the sides of $\angle 1$.
- **17.** Write another name for $\angle 6$.
- 18. Name a pair of angles that share exactly one point.

Geometry Chapter Tests

Find the value of the variable if P is between I and K.

4.
$$JP = 2x$$
, $PK = 7x$, $JK = 27$

5.
$$JP = 3y + 1$$
, $PK = 12y - 4$, $JK = 75$

6.
$$JP = 8z - 17$$
, $PK = 5z + 37$, $JK = 17z - 4$

Find the coordinates of the midpoint of a segment with the given endpoints.

7.
$$(16, 5)$$
 and $(28, -13)$

9.
$$(-4, -14)$$
 and $(-22, 9)$

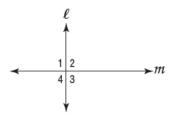
Find the distance between each pair of points.

10.
$$(43, -15)$$
 and $(29, -3)$

11.
$$(21, 5)$$
 and $(28, -1)$

12.
$$(0, -5)$$
 and $(18, -10)$

19. MULTIPLE CHOICE If $m \angle 1 = m \angle 2$, which of the following statements is true?



A
$$\angle 2 \cong \angle 4$$

B
$$\angle 2$$
 is a right angle.

$$C \ell \perp m$$

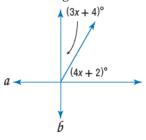
D All of the above

Find the perimeter of each polygon.

20. triangle *XYZ* with vertices X(3,7), Y(-1,-5), and Z(6,-4)

Geometry Chapter Tests

- **13.** ALGEBRA The measure of $\angle X$ is 18 more than three times the measure of its complement. Find the measure of $\angle X$.
- **14.** Find the value of x that will make lines a and b perpendicular in the figure below.



- **21.** rectangle *PQRS* with vertices *P*(0, 0), *Q*(0, 7), *R*(12, 7), and *S*(12, 0)
- **22. SAFETY** A severe weather siren in a local city can be heard within a radius of 1.3 miles. If the mayor of the city wants a new siren that will cover double the area of the old siren, what should the radius of the coverage area of the new siren be? Round to the nearest tenth of a mile.

Refer to the figure at the right.

- 23. Name the base.
- 24. Find the surface area.
- 25. Find the volume.

