

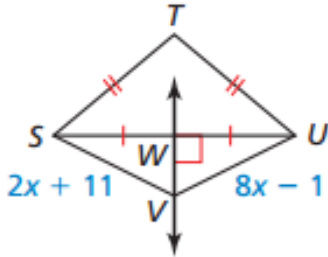
Review for 6.1 – 6.3

Name \_\_\_\_\_ Period \_\_\_\_\_

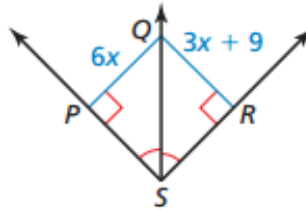
1. A point on the perpendicular bisector of a segment is equidistant from the \_\_\_\_\_ of the segment.
2. A point on the angle bisector of an angle is equidistant from the two \_\_\_\_\_ of the angle.

Find the indicated measure. Explain your reasoning.

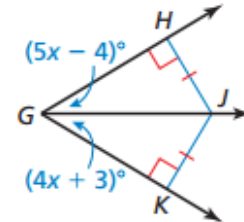
3. UV



4. QP



5.  $m\angle GJK$

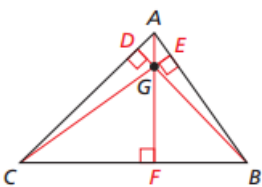


Fill in the blanks. A word list is provided. Words may be used more than once.  
**circumcenter, incenter, centroid, orthocenter**

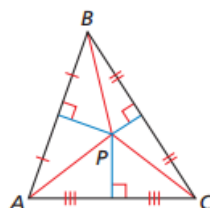
6. A/An \_\_\_\_\_ is the intersection (point of concurrency) of the three altitudes of a triangle.
7. A/An \_\_\_\_\_ is the point of concurrency of the three angle bisectors of a triangle.
8. A/An \_\_\_\_\_ is the point of concurrency of the three medians of a triangle.
9. A/An \_\_\_\_\_ is the point of concurrency of the three perpendicular bisectors of a triangle.
10. A/An \_\_\_\_\_ is equidistant from the sides of the triangle.
11. A/An \_\_\_\_\_ is equidistant from the vertices of the triangle.
12. The \_\_\_\_\_ is the triangle's center of gravity. You can use it to balance the triangle on a pencil.
13. A/An \_\_\_\_\_ is two-thirds of the distance from each vertex to the midpoint of the opposite side.

Name the point of concurrency pictured.

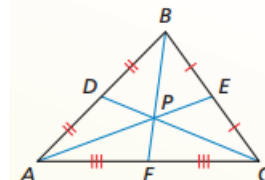
14.



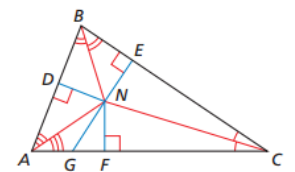
15.



16.

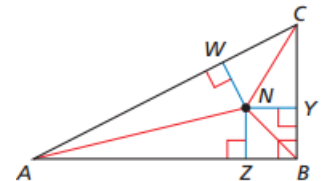
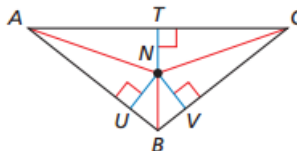
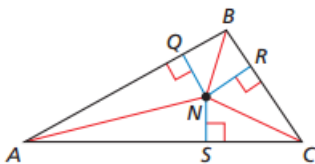


17.



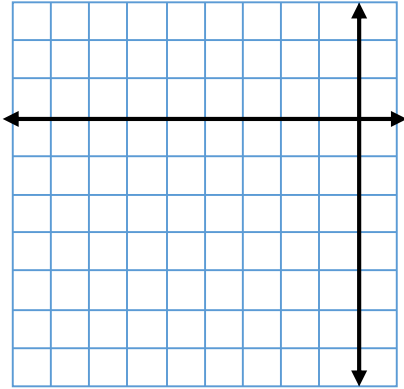
The incenter of  $\triangle ABC$  is point N. Use the given information to find the indicated measure.

18.  $NQ = 2x + 1$ ,  $NR = 4x - 9$ . Find NS.
19.  $NU = -3x + 6$ ,  $NV = -5x$ . Find NT.
20.  $NZ = 4x - 10$ ,  $NY = 3x - 1$ . Find NW.

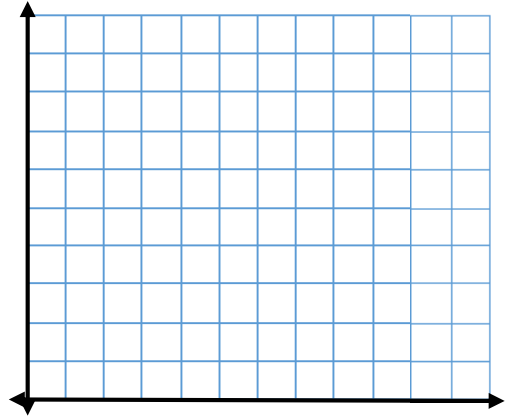


Find the coordinates of the circumcenter of the triangle with the given vertices.

21.  $A(-4, 2)$ ,  $B(-4, -4)$ ,  $C(0, -4)$

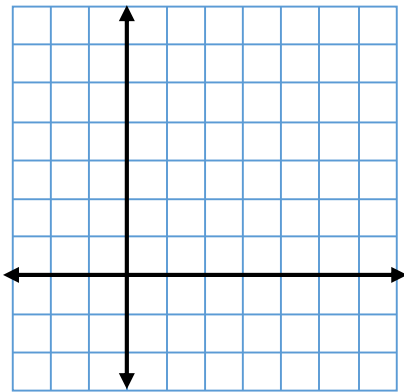


22.  $D(3, 5)$ ,  $E(7, 9)$ ,  $F(11, 5)$

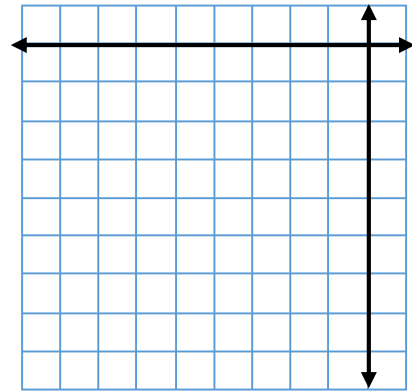


Find the coordinates of the centroid of the triangle with the given vertices.

23.  $J(-1, 2)$ ,  $K(5, 6)$ ,  $L(5, -2)$

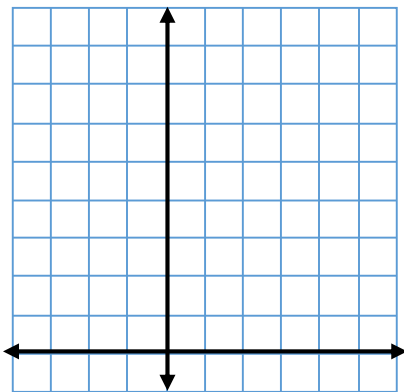


24.  $M(-8, -6)$ ,  $N(-4, -2)$ ,  $P(0, -4)$

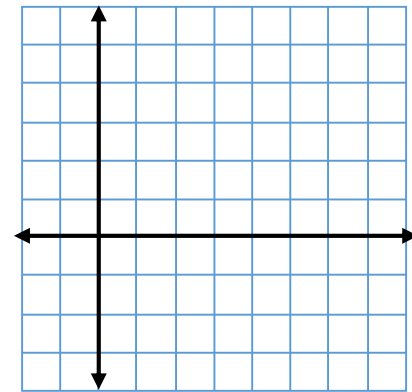


Tell whether the orthocenter is inside, on, or outside the triangle. Then find its coordinates.

25.  $T(-2, 5)$ ,  $U(0, 1)$ ,  $V(2, 5)$

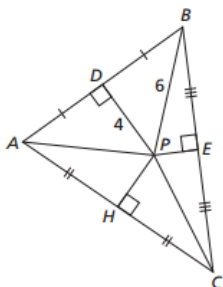


26.  $X(-1, -4)$ ,  $Y(7, -4)$ ,  $Z(7, 4)$

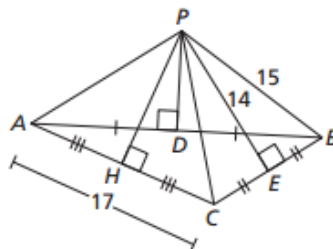


Find the indicated measure.

27.  $PC$



28.  $AP$



29.  $PS$

