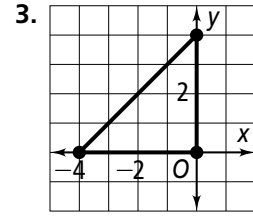
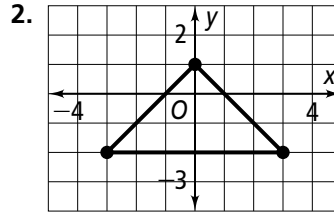
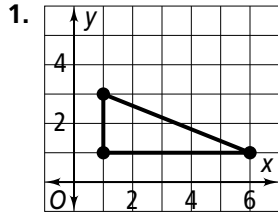


Practice

Bisectors in Triangles

4.3

Coordinate Geometry Find the circumcenter of each triangle.



Coordinate Geometry Find the circumcenter of $\triangle ABC$.

4. $A(1, 3)$
 $B(4, 3)$
 $C(4, 2)$

5. $A(2, -3)$
 $B(-4, -3)$
 $C(-4, -7)$

6. $A(-5, -2)$
 $B(1, -2)$
 $C(1, 6)$

7. $A(5, 6)$
 $B(0, 6)$
 $C(0, -3)$

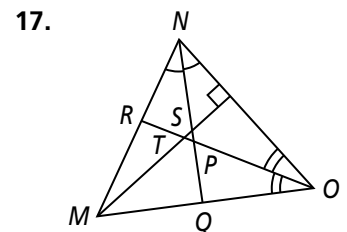
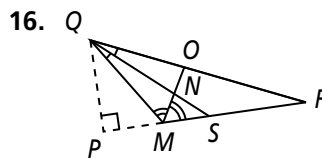
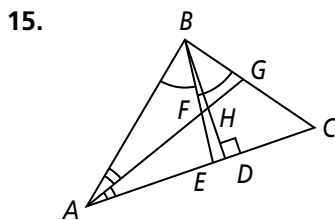
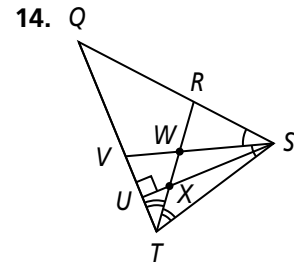
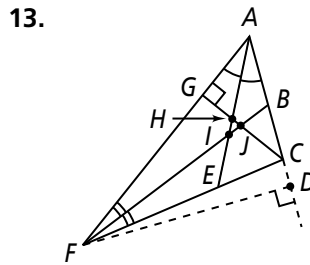
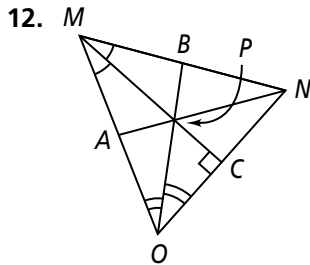
8. $A(1, 3)$
 $B(5, 3)$
 $C(5, 2)$

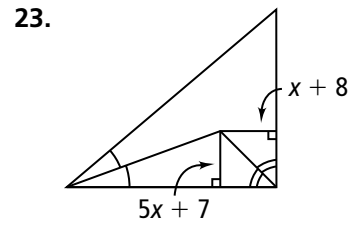
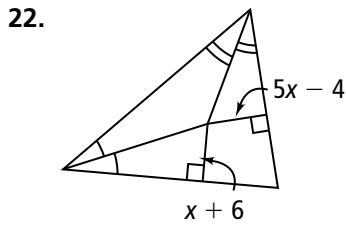
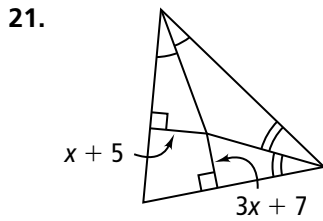
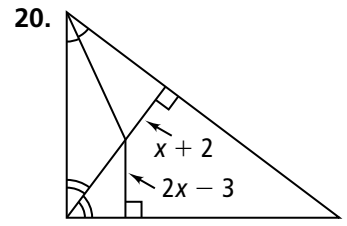
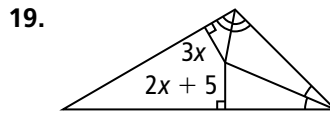
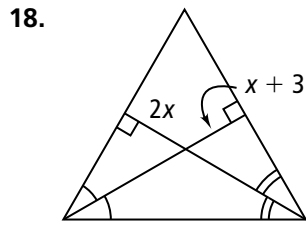
9. $A(2, -2)$
 $B(-4, -2)$
 $C(-4, -7)$

10. $A(-5, -3)$
 $B(1, -3)$
 $C(1, 6)$

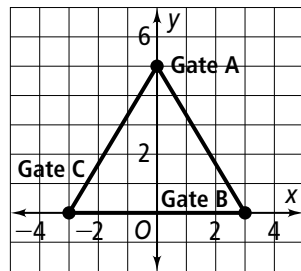
11. $A(5, 2)$
 $B(-1, 2)$
 $C(-1, -3)$

Name the point of concurrency of the angle bisectors.

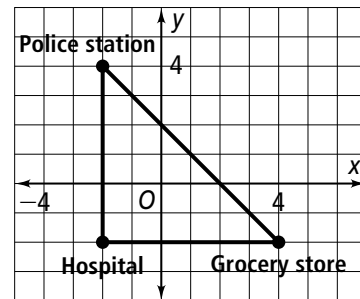




24. Where should the farmer place the hay bale so that it is equidistant from the three gates?



25. Where should the fire station be placed so that it is equidistant from the grocery store, the hospital, and the police station?



26. **Construction** Construct three perpendicular bisectors for $\triangle LMN$. Then use the point of concurrency to

27. **Construction** Construct two angle bisectors for $\triangle ABC$. Then use the point of concurrency to

3.