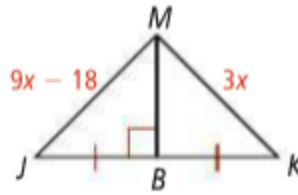


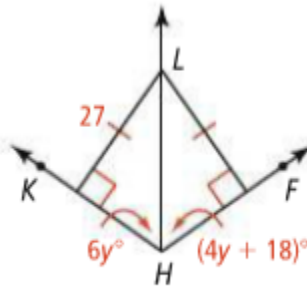
Use the figure at the right for Exercises 6–8.

6. What is the relationship between \overline{MB} and \overline{JK} ?
7. What is value of x ?
8. Find JM .

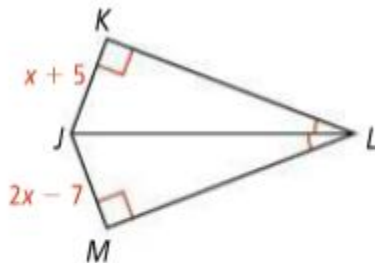


Use the figure at the right for Exercises 12–15.

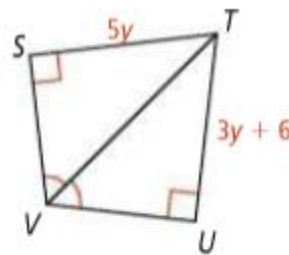
12. According to the diagram, how far is L from \overline{HK} ? From \overline{HF} ?
13. How is \overline{HL} related to $\angle KHF$? Explain.
14. Find the value of y .
15. Find $m\angle KHL$ and $m\angle FHL$.



16. **Algebra** Find x , JK , and JM .

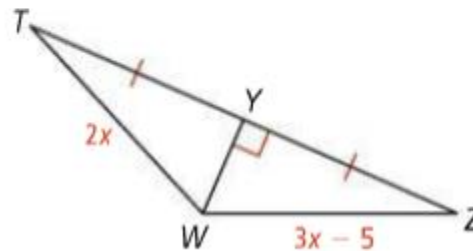


17. **Algebra** Find y , ST , and TU .

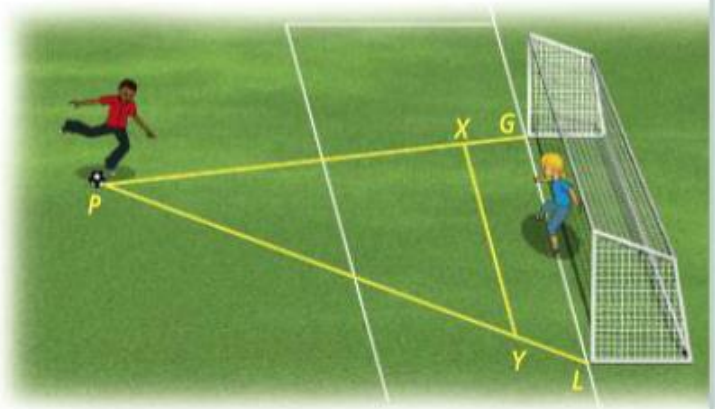


Algebra Use the figure at the right for Exercises 18–22.

18. Find the value of x .
19. Find TW .
20. Find WZ .
21. What kind of triangle is $\triangle TWZ$? Explain.
22. If R is on the perpendicular bisector of \overline{TZ} , then R is from T and Z , or = .



23. **Think About a Plan** In the diagram at the right, the soccer goalie will prepare for a shot from the player at point P by moving out to a point on \overline{XY} . To have the best chance of stopping the ball, should the goalie stand at the point on \overline{XY} that lies on the perpendicular bisector of \overline{GL} or at the point on \overline{XY} that lies on the bisector of $\angle GPL$? Explain your reasoning.



- How can you draw a diagram to help?
- Would the goalie want to be the same distance from G and L or from \overline{PG} and \overline{PL} ?

39. For $A(1, 3)$ and $B(1, 9)$, which point lies on the perpendicular bisector of \overline{AB} ?

- Ⓐ (3, 3) Ⓑ (1, 5) Ⓒ (6, 6) Ⓓ (3, 12)