

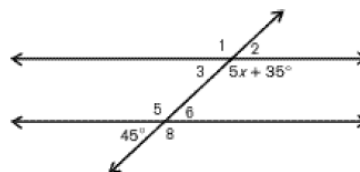
Thanksgiving Review-**Show all work**

- Find the distance between $(-2, -4)$ and $(2, 0)$. Leave your answer in simplest radical form.
- Find the midpoint of $(-4, 3)$ and $(10, -2)$.
- Write the equation of a line parallel to $y = \frac{3}{4}x + 5$ through $(4, 1)$.
- Write the equation of a line perpendicular to $y = -2x + 1$ through $(-2, -3)$.
- The ray \overrightarrow{GJ} is the angle bisector of $\angle FGH$ and $m\angle FGH = 75^\circ$. Find $m\angle FGJ$.
- Find the vertices of $\triangle LMN$ translated along the vector $\langle -3, 2 \rangle$ with $L(-2, 1)$, $M(-2, -3)$, and $N(1, -4)$.
- Find the vertices of $\triangle XYZ$ reflected across the line $y = x$ with $X(1, 5)$, $Y(-2, 2)$, and $Z(-5, 7)$.
- Find the vertices of $\triangle ABC$ rotated 180° around the origin with $A(1, 1)$, $B(2, 3)$, and $C(3, 1)$.
- $\triangle ABC$ is in the first quadrant and translated along $\langle 2, 1 \rangle$ and reflected across the x -axis. Which quadrant will the triangle be in after the first transformation? After the second transformation?

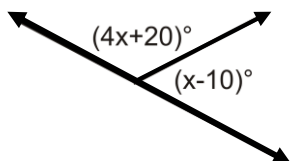
For 10-11, use the diagram to the right.

10. Find $m\angle 6$.

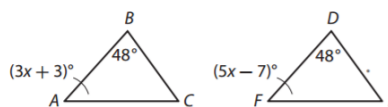
11. Find x .



12. Find x .



13. $\triangle ABC \cong \triangle FDE$. Determine the value of x .

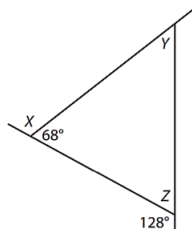


14. Use the pythagorean theorem. $a = 1, b = 7, c = ?$. Leave you answer in simplest radical form.

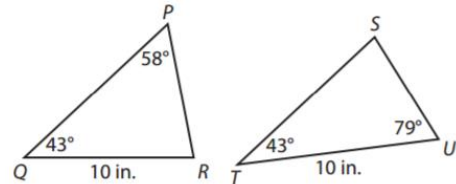
15. Use the pythagorean theorem. $a = ?, b = 2, c = 10$. Leave you answer in simplest radical form.

Find each angle measure

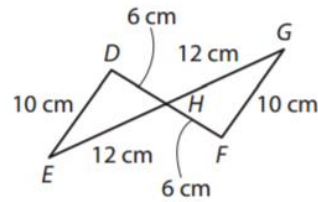
- $x =$
- $y =$
- $z =$



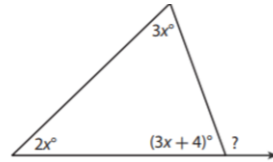
19. Determine whether the triangles are congruent.
Explain your reasoning.



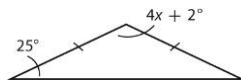
20. Determine whether the triangles are congruent.
Explain your reasoning.



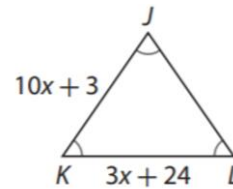
21. Find the measure of the angle with the question mark.



22. Find the measure of the top angle.



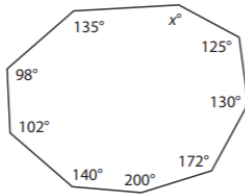
23. Find KL .



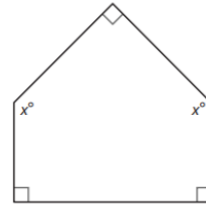
24. Find the sum of the measures of the interior angles of a 13-sided polygon.

25. A polygon has an interior angle sum of 3060° . How many sides must the polygon have?

26. Find x .

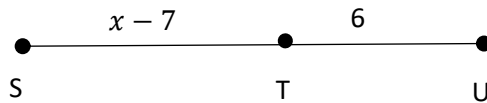


27. Find x .



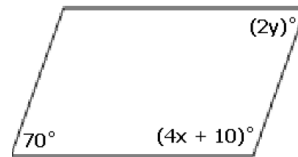
28. Find ST .

$SU = 2x - 12$



29. Find SU .

30. Find the value of x and y in the parallelogram.



31. If $m\angle DCE = 33^\circ$, what is $m\angle CDE$?

32. If $m\angle DCE = 33^\circ$, what is $m\angle ECB$?

33. If $BE = 6$ and $AD = 10$, what is AE ?

34. ABCD is a parallelogram. Find BE and AC

