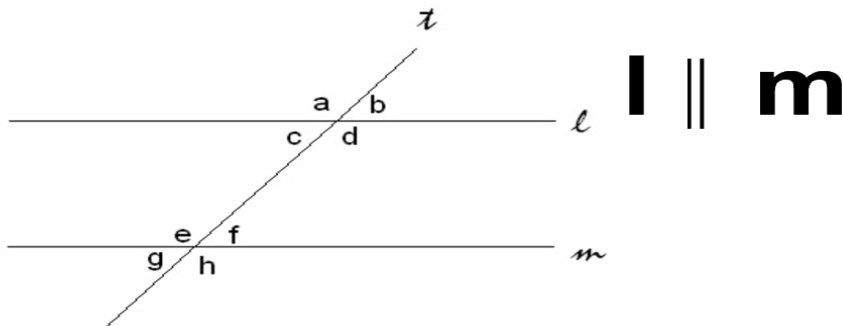


Parallel Lines and Angle Sums - Worksheet



1. $\angle d \cong \angle e$
These angles are called _____ angles
2. $\angle a \cong \angle e$
These angles are called _____ angles.
3. Alternate interior angles form the capital letters _____ or _____ .
4. Corresponding angles form the capital letter _____ .
5. Interior angles form the capital letter _____ .
6. Parallel lines never _____ .
7. Line **t** is called a _____ .
8. $\angle b + \angle h =$ _____ $^\circ$
9. $\angle e + \angle c =$ _____ $^\circ$
10. $\angle a \cong \angle \underline{\hspace{1cm}} \cong \angle \underline{\hspace{1cm}} \cong \angle \underline{\hspace{1cm}}$

Use the diagram above as shown to answer the following questions:

- | | |
|---|--|
| <p>11. Given: $\angle a = 115^\circ$</p> <p>$\angle a =$ _____ $^\circ$ $\angle e =$ _____ $^\circ$</p> <p>$\angle b =$ _____ $^\circ$ $\angle f =$ _____ $^\circ$</p> <p>$\angle c =$ _____ $^\circ$ $\angle g =$ _____ $^\circ$</p> <p>$\angle d =$ _____ $^\circ$ $\angle h =$ _____ $^\circ$</p> | <p>12. Given: $\angle b = x + 15^\circ$, $\angle h = 2x^\circ$</p> <p>$\angle a =$ _____ $^\circ$ $\angle e =$ _____ $^\circ$</p> <p>$\angle b =$ _____ $^\circ$ $\angle f =$ _____ $^\circ$</p> <p>$\angle c =$ _____ $^\circ$ $\angle g =$ _____ $^\circ$</p> <p>$\angle d =$ _____ $^\circ$ $\angle h =$ _____ $^\circ$</p> |
|---|--|
-
13. Given: $\angle c = 3x^\circ$, $\angle h = x + 40^\circ$
- $\angle a =$ _____ $^\circ$ $\angle e =$ _____ $^\circ$
- $\angle b =$ _____ $^\circ$ $\angle f =$ _____ $^\circ$
- $\angle c =$ _____ $^\circ$ $\angle g =$ _____ $^\circ$
- $\angle d =$ _____ $^\circ$ $\angle h =$ _____ $^\circ$