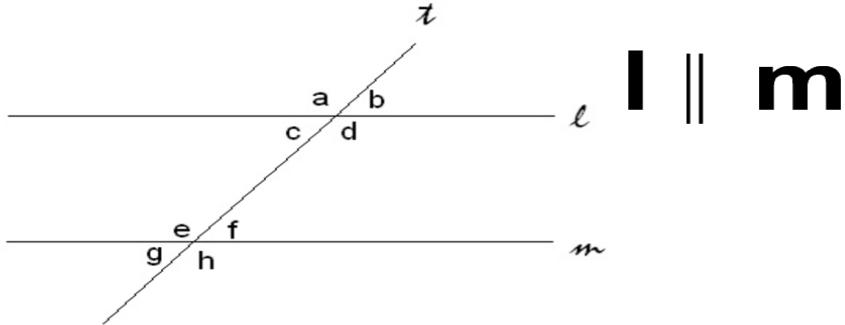


## Parallel Lines and Angle Sums - Worksheet



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.  $\angle b + \angle h = \underline{\hspace{2cm}}$  °
9.  $\angle e + \angle c = \underline{\hspace{2cm}}$  °
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:

- |   |  |
|---|--|
| 11. Given: $\angle a = 115^\circ$       | 12. Given: $\angle b = x + 15^\circ$ , $\angle h = 2x^\circ$ |
| $\angle a = \underline{\hspace{2cm}}$ ° | $\angle a = \underline{\hspace{2cm}}$ °                      |
| $\angle b = \underline{\hspace{2cm}}$ ° | $\angle e = \underline{\hspace{2cm}}$ °                      |
| $\angle c = \underline{\hspace{2cm}}$ ° | $\angle b = \underline{\hspace{2cm}}$ °                      |
| $\angle d = \underline{\hspace{2cm}}$ ° | $\angle f = \underline{\hspace{2cm}}$ °                      |
| $\angle e = \underline{\hspace{2cm}}$ ° | $\angle c = \underline{\hspace{2cm}}$ °                      |
| $\angle f = \underline{\hspace{2cm}}$ ° | $\angle g = \underline{\hspace{2cm}}$ °                      |
| $\angle g = \underline{\hspace{2cm}}$ ° | $\angle d = \underline{\hspace{2cm}}$ °                      |
| $\angle h = \underline{\hspace{2cm}}$ ° | $\angle e = \underline{\hspace{2cm}}$ °                      |
- 
- |  |   |
|--|---|
| 13. Given: $\angle c = 3x^\circ$ , $\angle h = x + 40^\circ$ |   |
| $\angle a = \underline{\hspace{2cm}}$ °                      | $\angle e = \underline{\hspace{2cm}}$ ° |
| $\angle b = \underline{\hspace{2cm}}$ °                      | $\angle f = \underline{\hspace{2cm}}$ ° |
| $\angle c = \underline{\hspace{2cm}}$ °                      | $\angle g = \underline{\hspace{2cm}}$ ° |
| $\angle d = \underline{\hspace{2cm}}$ °                      | $\angle h = \underline{\hspace{2cm}}$ ° |