$\qquad$
Given that $\vec{m} \| \vec{n}$ and $\vec{t}$ is a transversal, answer the following questions.


1. What type of and what is the relationship between angles $a$ and $g$ ?

Type: $\qquad$ Relationship: $\qquad$
2. What type of and what is the relationship between angles $d$ and $b$ ?

Type: $\qquad$ Relationship: $\qquad$
3. What type of and what is the relationship between angles $e$ and $h$ ?

Type: $\qquad$ Relationship: $\qquad$
4. What type of and what is the relationship between angles $d$ and $h$ ?

Type: $\qquad$ Relationship: $\qquad$
5. What type of and what is the relationship between angles $b$ and $c$ ?

Type: $\qquad$ Relationship: $\qquad$
6. What type of and what is the relationship between angles $b$ and $f$ ?

Type: $\qquad$ Relationship: $\qquad$
7. What type of and what is the relationship between angles $a$ and $h$ ?
$\qquad$ Relationship: $\qquad$

For problems 8 - , find the measure of $x$ and the measure of the indicated angles. Show all work.
8.

9.

10.


