

Name: .....

Please complete the following definitions.

- Given a subgroup  $H$  of a group  $G$  and an element  $x \in G$ , the *right coset*  $Hx$  is the subset

$$Hx = \{$$

- A subgroup  $H$  of a group  $G$  is said to be *normal in*  $G$  if

- A function  $f: G \rightarrow G'$  between groups  $G$  and  $G'$  is a *homomorphism* if

- If  $f: G \rightarrow G'$  is a homomorphism, then its *kernel* is  $\ker f = \{$