Worksheet Exercise 4．9．B．
Symbolizing Identities

## Name

Class ＿－＿－＿－＿－＿－－＿－－－＿－ Date －ーー－ーー－ー－ー－

Part B．Symbolize the following arguments in the blanks provided．Use the indicated predicate letters，relation letters，and name letters．

| $\begin{aligned} & \mathrm{L}=\text { likes to dance } \\ & \mathrm{H}=\text { hairdresser } \end{aligned}$ | $D=$ Dutchman | $\begin{aligned} & \mathrm{F}={ }_{-} \text {is a friend of } \\ & \mathrm{A}={ }_{-} \text {admires } \end{aligned}$ |
| :---: | :---: | :---: |
| $\mathrm{P}=$ person | $\mathrm{g}=$ George | $\mathrm{T}=$＿talks to |
| E $=$ exhausted | $s=$ Sally | $\mathrm{K}=$＿knows＿（active voice） |
| $\mathrm{T}=$ is in town | h＝Harry | $\mathrm{F}=$＿is faster than |
| S $=$ skater | $\mathrm{n}=$ Sally＇s neighbor | outskated $=$ some skater is faster |

1．George is a friend of Sally and also of Harry．Sally likes to dance，but Harry does not．So，George has at least two different friends．

|  | prem |
| :---: | :---: |
|  | prem |

2．Sally is a friend of all hairdressers but not of George，who is her neighbor．So，her neighbor is not a hairdresser．
$\qquad$
3．Sally doesn＇t admire anything except herself．Sally sometimes talks to herself，but she has never talked to George．So，Sally does not admire George．
$\qquad$
4．Only Sally is known by Harry，and only Harry is known by Sally．Some people are known by both Harry and by Sally．Sally is exhausted．So，Harry is exhausted．

|  | prem |
| :--- | ---: |
|  | prem |
|  | prem |
|  | prem |

5．Some people in town know Sally．At most one person knows Sally．So，no one out－ side of town knows Sally．
prem

|  | prem |
| :--- | :---: |

6．The fastest skater is a Dutchman．So，any skater who is not a Dutchman can be outskated．

|  | prem |
| :---: | :---: |
|  | concl |

