

$$\begin{array}{ccccc}
 E & & & & \\
 & \swarrow \scriptstyle \psi & & \searrow \scriptstyle g & \\
 & A \times_B N & \xrightarrow{\scriptstyle \varphi} & N & \\
 & \downarrow & & \downarrow & \\
 & A & \twoheadrightarrow & B &
 \end{array}$$