

$$\begin{array}{ccccc}
 A \oplus A & \xrightarrow{(f,g)} & X & \xrightarrow[p]{\text{TFib}} & Y \\
 \downarrow (1,1) & & \searrow (\partial_0, \partial_1) & \nearrow & \uparrow h \\
 A & \xleftarrow[\sigma]{\text{Weq}} & & & \tilde{A}
 \end{array}$$

The diagram illustrates a commutative structure involving several objects and morphisms:

- Top Row:** $A \oplus A \xrightarrow{(f,g)} X \xrightarrow[p]{\text{TFib}} Y$
- Left Vertical Arrow:** $A \oplus A \rightarrow A$ labeled $(1,1)$
- Right Vertical Arrow:** $\tilde{A} \rightarrow Y$ labeled h
- Bottom Horizontal Arrow:** $\tilde{A} \rightarrow A$ labeled σ (with Weq above it)
- Diagonal Arrows:**
 - From $A \oplus A$ to \tilde{A} labeled (∂_0, ∂_1)
 - From \tilde{A} to X (dashed arrow)
- Label Cofib:** Positioned near the diagonal arrow from $A \oplus A$ to \tilde{A} .