

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

The diagram illustrates a commutative structure involving objects $A \oplus A$, X , Y , A , and \tilde{A} . The horizontal top arrow is labeled (f,g) . The horizontal bottom arrow is labeled σ with Weq above it. The vertical left arrow is labeled $(1,1)$. The vertical right arrow is labeled h . The diagonal arrow from $A \oplus A$ to \tilde{A} is labeled (∂_0, ∂_1) . The diagonal arrow from \tilde{A} to X is dashed. The label Cofib is placed near the diagonal arrow from $A \oplus A$ to \tilde{A} . The label p is placed above the arrow from X to Y , and TFib is placed below it.