Definition (Span). Given a category $\mathbf{C}$, a *span* from an object X to an object Y is a diagram of the form

$$
\begin{array}{ccc}
 & Z & \\
f \swarrow & & \searrow g \\
X & & Y
\end{array}
$$
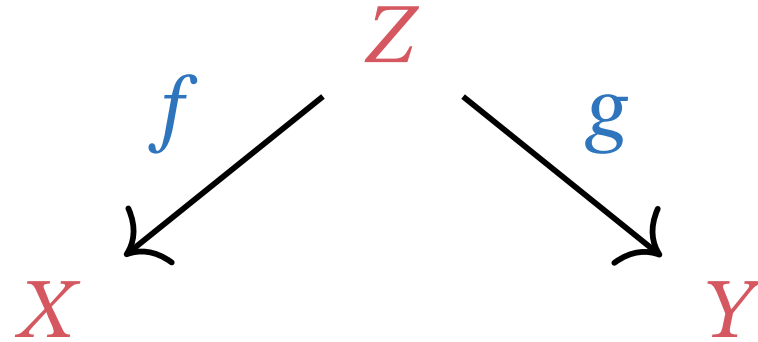
where Z is some other object of $\mathbf{C}$.