For each of the following pairs or triples of structures, distinguish them by finding a sentence that is true in the first, but false in the second.

In the language with one binary relation $a \rightarrow b$:

\[
\begin{array}{cc}
\text{vs.} & \\
\end{array}
\]

In the language with one binary relation $a \rightarrow b$:

\[
\begin{array}{cc}
\text{vs.} & \\
\end{array}
\]

In the language with a symmetric binary relation $a \sim b$, indicated here:

\[
\begin{array}{cc}
\text{vs.} & \\
\end{array}
\]

In the language with a symmetric binary relation $a \sim b$, indicated here:

\[
\begin{array}{cc}
\text{vs.} & \\
\end{array}
\]

In the partial orders $a \leq b$ whose skeletons are pictured below:

\[
\begin{array}{cc}
\text{vs.} & \\
\end{array}
\]

In the partial orders $a \leq b$, whose skeletons appear below:

\[
\begin{array}{ccc}
\text{vs.} & \text{vs.} & \\
\end{array}
\]