Assignment 1

Consider the proofs in the Core_Logic.thy file of the following formulas:

$$p \longrightarrow p$$

$$p \longrightarrow (p \longrightarrow q) \longrightarrow q$$

$$p \longrightarrow q \longrightarrow q \longrightarrow p$$

Use the same style in order to construct proofs of the following formulas:

$$(q \longrightarrow r) \longrightarrow (p \longrightarrow q) \longrightarrow p \longrightarrow r$$

$$(p \longrightarrow q \longrightarrow r) \longrightarrow q \longrightarrow p \longrightarrow r$$

$$(p \longrightarrow q \longrightarrow r) \longrightarrow (p \longrightarrow q) \longrightarrow p \longrightarrow r$$