

Trolley Problem

October 8, 2025

While walking through a fictional forest, you encounter three trolls guarding a bridge. Each is either a knight, who always tells the truth, or a knave, who always lies. The trolls will not let you pass until you correctly identify each as either a knight or a knave. Each troll makes a single statement:

Troll 1: If I am a knave, then there are exactly two knights here.

Troll 2: Troll 1 is lying.

Troll 3: Either we are all knaves, or at least one of us is a knight.

Which troll is which?