

Knowledge Type 10

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P1 [instance_of: PROP1, is_trait_of: X11, ..., is_trait_of: X1i]
and
...
and
Pm [instance_of: PROPm, is_trait_of: Xm1, ..., is_trait_of: Xmj]
causes
P [instance_of: PROP, is_trait_of: Y1, ..., is_trait_of: Yk]
implies
X=Y

```

where, $X \in S_1$, such that S_1 is a set of all the entities that are associated with the properties P_1, \dots, P_m and $Y \in \bigcup_{i=1}^k \{Y_i\}$.

Intuitively, a statement of the above category means that if a set (S) of properties, existing together, causes another property P then an entity that is associated with a property P_i in S is also associated with P.

Examples:

1. Sam and Amy are passionately in love, but Amy's parents are unhappy about it, because they are fifteen. Who are fifteen?

Correct Answer: Sam and Amy.

Required Knowledge Instance:

P1 [instance_of: in_love, is_trait_of: X [instance_of: entity]]

and

P2 [instance_of: fifteen years old, is_trait_of: X [instance_of: entity]]

causes

P [instance_of: unhappy, is_trait_of: Z [instance_of: {entity, parents}, related_to: Y

[instance_of: entity]]]

implies

X=Y

2. Sam and Amy are passionately in love, but Amy's parents are unhappy about it, because they are snobs. Who are snobs?

Correct Answer: Amy's parents

Required Knowledge Instance:

P [instance_of: snob, is_trait_of: X [instance_of: entity]]

causes

P [instance_of: unhappy, is_trait_of: Y [instance_of: entity]]

implies

X=Y

3. In July, Kamtchatka declared war on Yakutsk. Since Yakutsk's army was much better equipped and ten times larger, they were victorious within weeks. Who was victorious?

Correct Answer: Yakutsk.

Required Knowledge Instance:

P [instance_of: better, is_trait_of: X [instance_of: entity]]

causes

P [instance_of: victorious, is_trait_of: Y [instance_of: entity]]

implies

X=Y