

# Homework #1

1. Find (using internet) and comment about definition of science by Karl Popper compared with definition of intelligence by Piaget.
2. Read about different kinds of logic (<http://en.wikipedia.org/wiki/Logic>) and give brief summary (put emphasis on mathematical logic); in particular read and comment about the concept of rationality (and application in artificial intelligence) comparing with definition of intelligence by Piaget.
3. Explain what is the Gödel's completeness theorem about (Compare with definition of intelligence by Piaget)?

Problems on complex numbers:

Do problems in **bold red** – all other problems are exam problems

**Set 13.1** 1, 3, 5, 7, 9, **11**, 13, **15**, 17, 19

**Set 13.2** 1, 3, **5, 9**, 11, 13, 15, 17, 19, 21, 23, **25**

**Set 13.3** **12, 15, 21, 23**

**Set 13.4** 1, **3**, 5, 7, **9**, 13, 15, 17, 19, **21, 23**

**Set 13.5** 1, 3, 5, 7, 9, **11**, 13, **15**, 17

**Set 13.6** 1, 3, 5, 7, **9**, 11, 13, 17, **19**, 21, 23, 25

**Set 13.7** 1, 3, 5, 7, 9, 19, 21, 23, **25**, 27