Problem Set 1, Problems 0 and 1

Problem 0: Reading and response
Put your response to the reading below.

I disagree with this statement that whether in science or business, we "don't have to settle for models at all." Models are very important in science as it allows us to test our hypotheses and learn with explanations. This would, in turn, allow for improvements and corrections on said hypotheses. An example used in the article is that Google can translate languages without actually knowing them. Language itself is a model. Google uses previous and new data from users/web and artificial intelligence to build upon its model of various languages. This would lead to more words being able to be translated and new sentences and logic could be formed. Models allow us to see how our hypothesis would translate in the real world.

Problem 1: Boolean expressions and conditional execution

1-1. Boolean expressions

    a) y == 2x

    b) x % 4 == 0

    c) x >= 3 and x <= 15

1-2. Conditional execution: Calls to the function `mystery()`

function call	output
a. mystery([3, 3, 3])	cow how row
b. mystery([3, 4, 5])	cow bow row
c. mystery([3, 5, 2])	mow low pow row
d. mystery([5, 4, 3])	wow row
e. mystery([3, 7, 5])	low pow row
f. mystery([8, 2, 2])	tow row