Philosophy 405: Knowledge, Truth and Mathematics Spring 2008 M, W: 1-2:15pm Hamilton College Russell Marcus rmarcus1@hamilton.edu

Class 5: Modern Rationalism I, Descartes and Leibniz

I. Review of Aristotle (See Class 4 notes.)

II. On the objectivity of mathematics

Sarah asks, "What if...Descartes never thought of the idea of a supremely perfect being" (p 5). And, "What does it mean for something to be true if no one is aware of it?" The end of the big paragraph on Sarah's p 2 contains the answer, the important point about the objectivity of mathematics. Properties of mathematical objects are discovered, rather than created. They have their own true, and immutable natures. We can not make them any way we want to make them. Descartes will hold the same position about God.

III. Definitions

Let's use 'Platonism' to refer the view that we ascribe to Plato and his followers, including the theory of forms.

We will use 'platonism' to refer to the belief, roughly, that mathematical objects exist outside of space and time.

So, Plato is both a Platonist and a platonist.

Descartes is a platonist, but not a Platonist.

I will put up some observations about Descartes and Leibniz in the notes for Class 6/