INDISPENSABILITY ARGUMENT AND INSTRUMENTAL NOMINALISM

RICHARD PETTIGREW

Abstract: In the philosophy of mathematics, indispensability arguments aim to show that we are justified in believing that mathematical objects exist on the grounds that we make indispensable reference to such objects in our best scientific theories ([Quine, 1981a], [Putnam, 1979a]) and in our everyday reasoning ([Ketland, 2005]). I wish to defend a particular objection to such arguments called instrumental nominalism . Existing formulations of this objection are either insufficiently precise or themselves make reference to mathematical objects. I show how to formulate the position precisely without making any such reference.

1