The following web of claims expresses a believable view of mathematical epistemology: ‘Mathematics is an a priori science, in which proofs play a central role. This is largely because thinking through an argument warrants high confidence in its conclusion only if the argument is a proof. If, in thinking through an argument, visual experience helps us not merely to grasp the argument, but also to accept it, the argument is not purely a priori but contains an a posteriori element, and for that reason is not a proof.’

I will cast doubt on all of this, apart from the claim that proofs play a central role, in order to make way for a more nuanced (and more interesting) epistemology of mathematics.