The indefinite accumulation of finite amounts: A Socratic educative experience.

Summary: We present a semi-structured clinic interview designed to ease the mental construction of a suitable concept-image of the notion of convergence for series of positive numbers. Cognitive obstacles will manifest themselves along the interview and we shall deal with them and teach the student how to overcome them. A special computer generated tool has been designed to be used by the interviewee to help provide plausible answers to the questions posed. Several situations will arise showing the limits of our colloquial approach and visualizations provided by the computer tool and we shall discuss why a mathematical theory is necessary if what we seek is to provide exact answers with certitude.

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