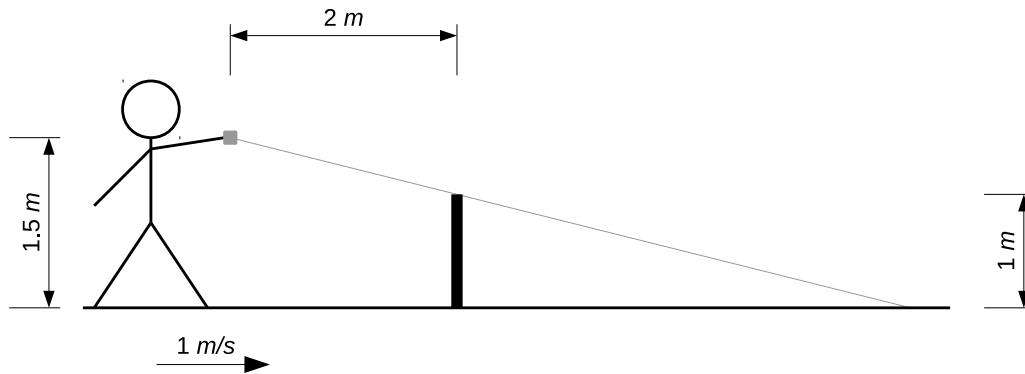


Mathematics 1110H – Calculus I: Limits, Derivatives, and Integrals

TRENT UNIVERSITY, Summer 2026 (S62) [reading course]

Quiz #5

*Due just before midnight on Friday, 10 July.**



1. Stickon Stick, carrying a lamp 1.5 m above the ground, walks at 1 m/s along level ground directly toward a 1 m tall post at night. How is the length of the shadow cast by the post in the lamplight changing at the instant that the lamp is 2 m from the post?

* You should submit your solutions via Blackboard's Assignments module, preferably as a single pdf. If that fails, please submit directly to the instructor on paper or via email to sbilaniuk@trentu.ca. You may work with others, use whatever tools you like, and look things up, so long as you write up your submission by yourself and give due credit to your collaborators and any tools or sources you actually used.