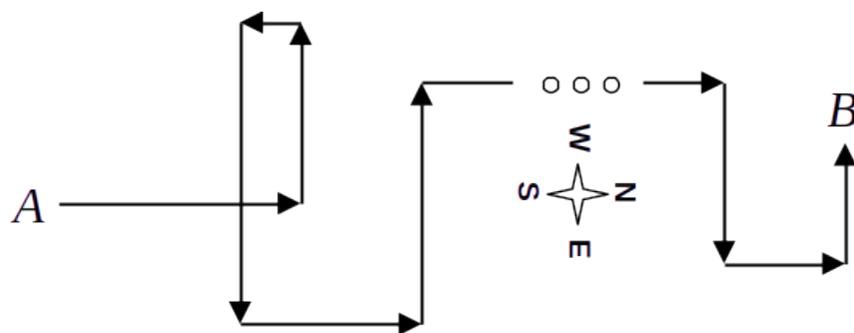


Mathematics 1110H (Section A) – Calculus I: Limits, Derivatives, and Integrals
TRENT UNIVERSITY, Fall 2024

Quiz #1
Walk Away?

Wednesday, 11 September.*

Nemo Sum walks from point A to point B and then back again, taking the exact same path in the opposite direction. Nemo always walks in one of the cardinal directions, *i.e.* north, south, east, or west, but not always at the same speed. For reasons known only to higher powers, Nemo always walks at 4 km/h when going North or South; going East, Nemo always walks at 3 km/h ; and going West, Nemo always walks at 6 km/h .



Pieces of a possible path.

Nemo's walk, from the start at point A to the return at point A , lasts exactly 6 hours.

1. How long is the path taken by Nemo from point A to point B ? [3]

NOTE. The question is asking for the length of the path traversed by Nemo, not the distance from A to B .

2. How long after setting out from point A might Nemo have reached point B ? [2]

Hint: The answer to this question should be a range of times, rather than a single time.

* Please submit your solutions, preferably as a single pdf, via Blackboard's Assignments module before midnight. If that fails, please submit them to the instructor on paper or via email to sbilaniuk@trentu.ca as soon as you can.