

November 1621

Dear Friend,

Please help! I have left a pumpkin pie sitting on a table back at the settlement. Our native friends have been asking about this delicious dessert and would be devastated if we don't bring one to our feast. The situation may become tense if we don't bring the pie back as soon as possible, so get to the settlement and back as fast as possible.

Haste to ye!

*William Bradford*

Governor of Plymouth Colony

1. The feast is being held on the edge of a forest, one mile west of the edge of the eastern side of the forest. You need to run through the forest and then through a field to arrive at the settlement, which is located one mile east of the west side of the field and 4 miles south of the forest. If you run through the forest at 3 mi/hr and through the field at 5 mi/hr, where should you exit the forest to arrive at the settlement as fast as possible? Justify your answer using calculus.
2. How long will it take to get the pie and return to the feast?
3. What was your average speed for the entire trip?

