Math 120 A - Spring 2009
Mid-Term Exam Number Two
May 21, 2009
Answers

There were two versions of the exam.
Version A - In problem 2, Jürgen runs at 3 meters per second.

1. (a)
$$L(t) = \frac{100t + 500}{t + 10}$$

   (b)
$$L^{-1}(t) = \frac{10t - 500}{100 - t}$$

2. (a) 186.5428 m (b) 62.5714 sec.

3. 7 hours

4. 3.309 cm

Version B - in problem 2, Jürgen runs at 4 meters per second.

1. (a)
$$L(t) = \frac{100t + 750}{t + 10}$$

   (b)
$$L^{-1}(t) = \frac{750 - 10t}{t - 100}$$

2. (a) 3.9997 m (b) 40.4444 sec.

3. 8 hours

4. 2.9028 cm