There were two versions of the exam.

**Version A**
In version A, in problem 1, Maggie moves at 6 meters per second.

1. (a) \(x = 12 - 5.6921t\), \((b) \quad D = \sqrt{(12 - 5.6921t)^2 + (3 - 1.8974t)^2}\)
2. 5.2154 seconds
3. (a) \(f(7) = 10.8\) (b) The smallest value is \(f(12) = 3.46666\).
4. \(x = -24\) is the only solution.

**Version B**
In version B, in problem 1, Maggie moves at 8 meters per second.

1. (a) \(x = 15 - 7.4278t\), \((b) \quad D = \sqrt{(15 - 7.4278t)^2 + (7 - 2.9711t)^2}\)
2. 8.61125 seconds
3. (a) 14.8 (b) The largest value is \(f(-1) = 64.66666\).
4. 8.4 is the only solution.