

Math 120 A, B Autumn 2012
Mid-Term Exam Number Two
November 15, 2012
Answers

There were two versions of the exam.

Version A: In problem 1, Maria heads toward the point (15, 12).

1. (a) $x = 5t, y = 4t$ (b) $x = 8 - 2t, y = \frac{1}{2}t$ (c) $\frac{32}{35}$ seconds
2. 2 days from today
3. 40.5838 years after 2000
4. (a) $b(x) = 3x - 4$ (b) $g^{-1}(x) = \frac{4+x^2}{2x}, x \geq 2$ (c) $h(x) = \frac{2}{5}x$ is one solution

Version B: In problem 1, Maria heads toward the point (4, 8).

1. (a) $x = 2t, y = 4t$ (b) $x = 6 - t, y = 3t$ (c) $\frac{9}{5}$ second
2. $23.\bar{3}$ days from today
3. 34.915 years after 2000
4. (a) $b(x) = 2x - 4$ (b) $g^{-1}(x) = \frac{9+x^2}{2x}, x \geq 3$ (c) $h(x) = \frac{1}{18}x$ is one solution