Makeup for Exam 1
Math 2850-002
Fall 2013 **Name** _____
Odenthal

Instructions: Please write neatly. There is 1 problem on 1 page.
Show your work! Explain your answers.

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1. This problem has three parts. Each part refers to a projectile that is launched from a platform 24 feet above the ground at an angle of $\pi/4$ radians with an initial speed of 192 feet per second. *Ignore wind resistance. Choose a convenient coordinate system.*

   (a) (15 points) Find the velocity $\mathbf{v}(t)$ of the projectile.

   (b) (15 points) Find the position $\mathbf{r}(t)$ of the projectile.

   (c) (15 points) Find the maximum height above the ground reached by the projectile.