

Last name:

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

First name:

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

No Name = No grade. Write your name **NEATLY**. If I can't read it, you get **NO** credit.

Circle your section: 810 811 812

Failure to circle the correct section will delay the return of this quiz.

An object of mass m can only move on the $+x$ axis. It is subjected to a force in the $+x$ direction given by

$$F(x) = \frac{\alpha m}{x^2}$$

where α is a constant and x is the distance from the origin. The object moves from $x = a$ to $x = b$. If the velocity of the object when it was at $x = a$ was v_0 in the $+x$ direction, then what is its velocity when it is at $x = b$ assuming no other force acts on it.

Answer: _____