

Last name:

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

First name:

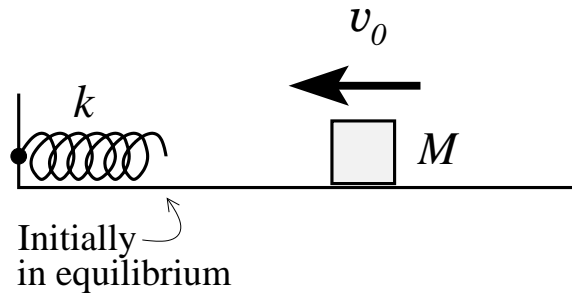
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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.

A block of mass  $M$  is moving at speed  $v_0$  along a frictionless horizontal surface toward a spring with force constant  $k$  that is attached to a wall. The spring has negligible mass.



Find the maximum distance the spring will be compressed. Express your answer in terms of  $v_0$ ,  $M$ , and  $k$ .

Answer: \_\_\_\_\_