

**QP13**

A spigot pours rice onto a large platform, which is the platform of a scale. At a time  $t = 0.0$  sec, the spigot is opened and rice begins to pour out (with initial velocity 0) at a rate of  $1.00$  kg/sec onto the platform from a height of  $10.0$  m above.

- a) (1 point) At  $t = 10$  sec what is the weight of the rice on the platform?
- b) (2 points) What does the scale read at this time? Hint: consider the change in vertical momentum per unit time.