

Work and Energy

Concept Review

Power

A man accidentally knocks a flowerpot off a high window ledge. The flowerpot drops straight down under the influence of gravity.

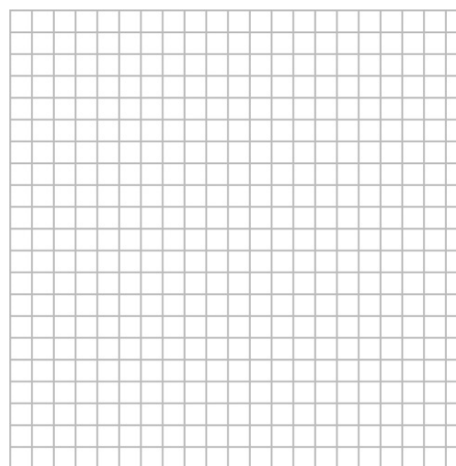
1. What is the velocity of the flowerpot as it falls?

2. What is the distance the flowerpot falls?

3. What is the force acting on the flowerpot as it falls?

4. What is the work done on the flowerpot as it falls?

5. Assume the flowerpot has a mass of 5.00 kg and drops a total distance of 15.0 m. In the space provided, graph the work done on the flowerpot as a function of time.



6. The flowerpot described in item 5 falls for a total of 1.75 s. What is the power delivered by the flowerpot in this interval?

$(g = 9.81 \text{ m/s}^2)$
