Work, Power and Energy Questions

1. How much work is done moving a 14.3 kg box across a floor (frictionless) 7.5m?
2. What is the efficiency of your super lifting machine lifting water bucket with a mass of 2.5 kg up 36 m using a 1800W machine for 60 seconds?
3. A) How much work is done slowing down Frank ‘The Tank’ Roberts with a mass of 1200kg (he’s a tank) from 9.2 m/s to 3.5 m/s?
4. What is the power rating, if that slow down occurred in 2.3 seconds? How about in hp(a hp is 760w)?
5. What is the velocity of a ball (2.5kg) what’s fallen from 1.85m to 0.95m? (Hint this is a conservation of energy type problem)
6. How much energy is lost during the cooling of 1300g water from 103⁰ to 57⁰?