

Power Practice Problems

1. A 30-N object is lifted a distance of 25 meters.
 - a. How much work is done?

 - b. If it takes 5 seconds to lift, what is the power?

2. If 4500 joules of work are done to lift an object in 5 seconds, what is the power?

3. A person pushes a box across the floor a distance of 50 meters. Pushing the box required a force of 20 N and took the person 40 seconds.
 - a. What is the work?

 - b. What is the power?

Power Practice Problems

4. If a crane lifts a 35,000-N beam a distance of 85 m over 15 s, how much power does the crane have?

5. How much work does a 30-W engine do if it operates for 40 seconds?

6. A crane lifts a 350-kg stack of drywall to a height of 70 m over 90 seconds.
 - a. How much work does the crane do?

 - b. How much power does the crane generate?