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Lab Physics-End of Chapter 8 Questions (pages 101-118)

**Review Questions (page 117)**

1. Force x Distance=Work and it changes energy

2. 3 x as much work

3. 10 kg load W=100N x 2m =200 J 5 kg load W=50N X 4 m=200 J Therefore they are equal

4. W=F x D = 10 N x 10 m= 100 J

5. P=W/t = 100J/.5s = 200 W P=W/t = 100 J/1s= 100 W

6. Potential energy and kinetic energy

7a.100 J (Work=change in potential energy)

7b.200 J (twice the distance=twice the potential energy)

8. 200 J (Conservation of energy)

9. twice the speed = 4 X the kinetic energy (KE=1/2mv2) 3 x speed = 9x KE

16. MA=# of times the force is multiplied by the machine