

MA 182 GROUP WORK (6.5)

NAME _____

1. A force of 15 lbs is required to stretch a spring from its natural length of 6 inches to a length of 9 inches. How much work is done in stretching the spring to a length of 10 inches?

2. A 1800 lb elevator is suspended by a 300 ft cable that weighs 15lb/ft. How much work is required to raise the elevator from the basement to the third floor, a distance of 30 ft?

Note: The elevator is lifted a total of 30 feet. The lower portion of the cable is lifted a total of 30 feet. The upper portion of the cable is lifted a portion of 30 feet.