# Physics 123 Prelab 5:
Newton's 3rd Law and the Static Friction Force
## Physics 123: Electricity and Magnetism

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A hand pushes *horizontally* with a constant force on two blocks stacked against a wall. The blocks do not move. The coefficient of static friction μ_s between hand and block A is zero. The mass of block A is greater than that of block B.
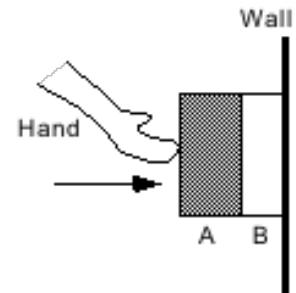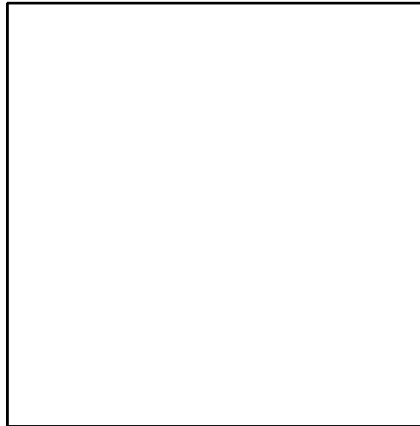

1. Draw a separate free-body diagram for each block. For each force, be sure to indicate: the type of force, the object exerting the force, and the object on which the force is being exerted.

Free-body diagram for Block A
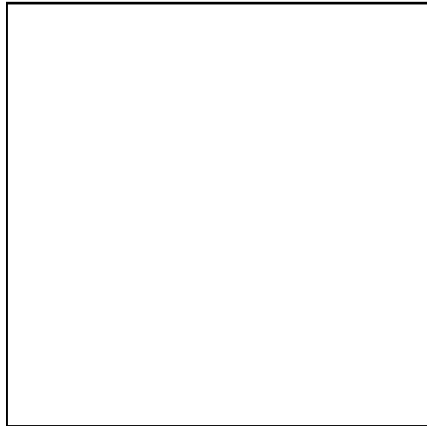
Free-body diagram for Blcok B

2. Suppose the hand pushes horizontally with a constant force that is twice as large as in question 1. Would the friction force exerted by the wall be *greater than, less* or *equal to* the friction force by the wall in question 1?   Explain.