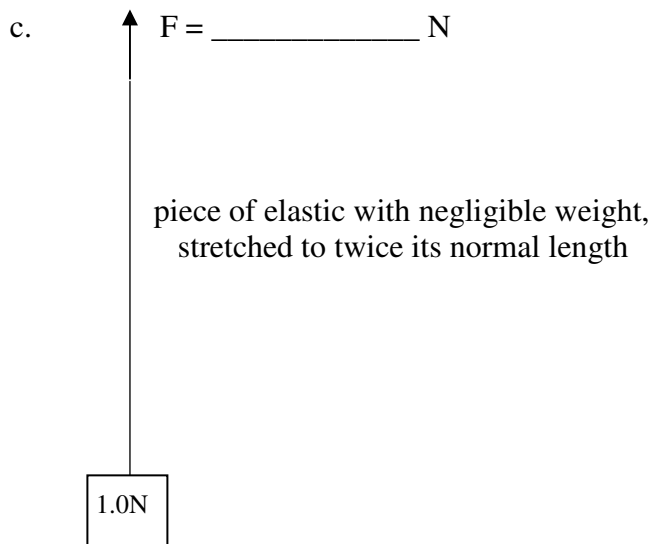
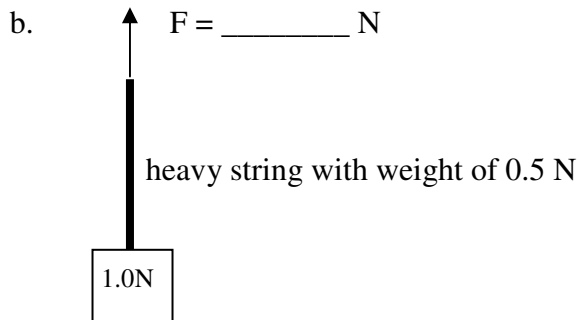
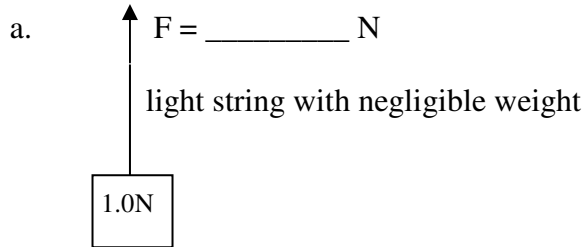
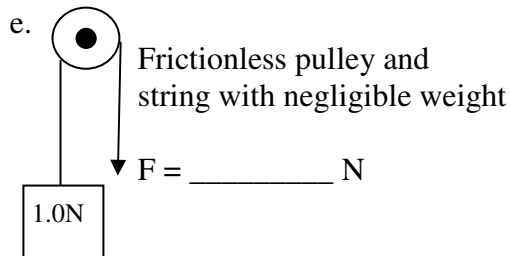
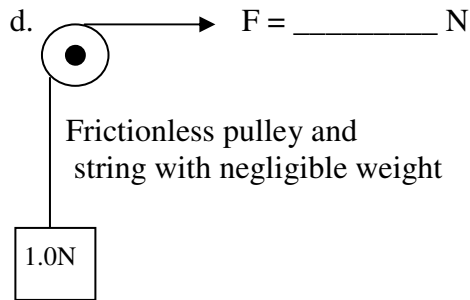


Physics 200B Lab 6 homework

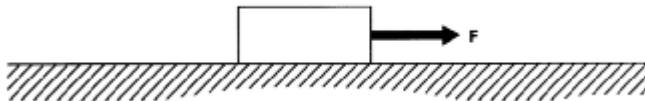
Name: _____

1. A 1.0-N weight is hanging at rest as shown. In each case, write in the magnitude of the unknown force. Explain the reasoning for each of your answers.





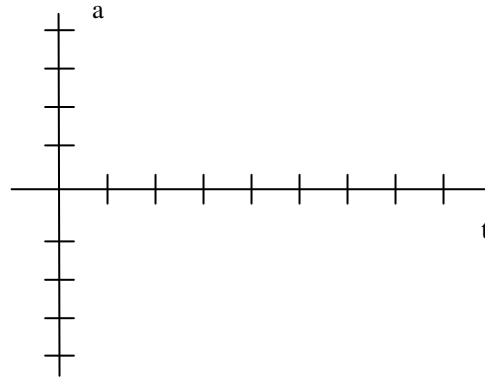
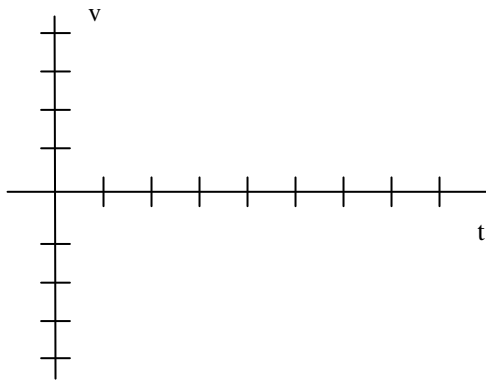
Questions 2-4 refer to the block on a flat surface shown below. A force F is applied to the block as shown. With an applied force of 2.5 N, the block moves with a constant velocity.



2. Explain how the block can move with a constant velocity even though it has a force applied to it. Is Newton's first law violated?

3. The block is now moving with a constant velocity that is twice as large as before. Approximately what applied force is needed to keep the block moving with this larger constant velocity? Explain.

4. Suppose that a constant force F of 5.0 N is applied to the block. Sketch below the shape of the velocity-time and acceleration-time graphs for the block.



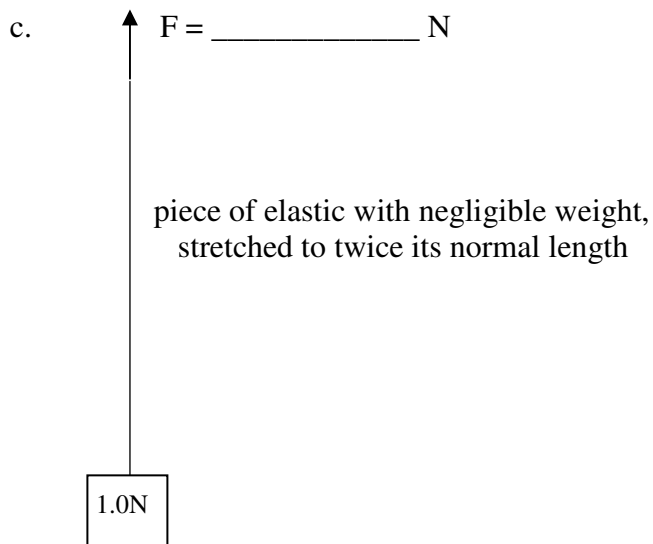
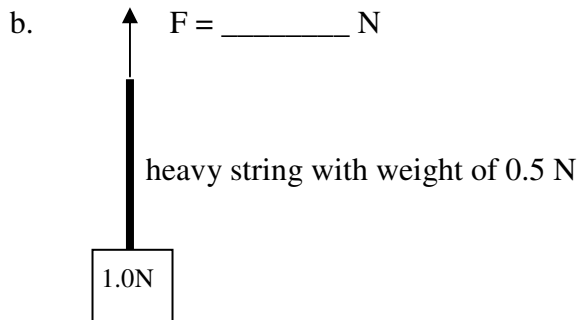
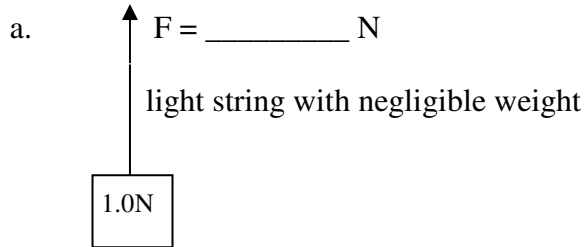
5. Using your data from the last investigation, determine the values for the coefficient of kinetic friction between the block and the ramp for each of the masses you used. Show your work (including your raw data) below or on a separate page. Include an estimate of the uncertainty. Report your results in an appropriate way (properly rounded, with units). Are your results reasonable? Do the results indicate that the coefficient of kinetic friction is the same for the three masses, as our simple model says it should be, since it should depend only on the materials involved?

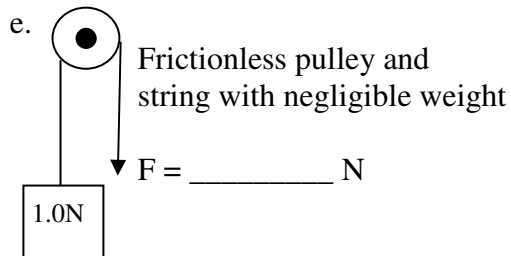
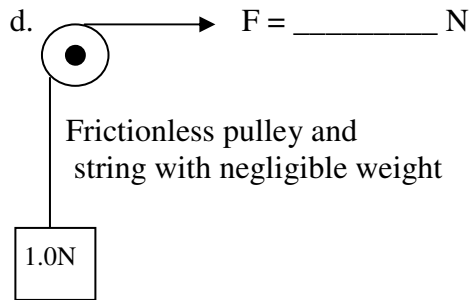
|

Physics 200B Lab 6 homework

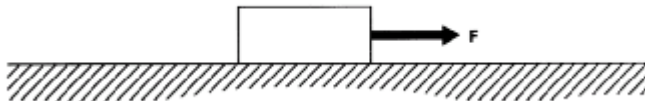
Name: _____

1. A 1.0-N weight is hanging at rest as shown. In each case, write in the magnitude of the unknown force. Explain the reasoning for each of your answers.





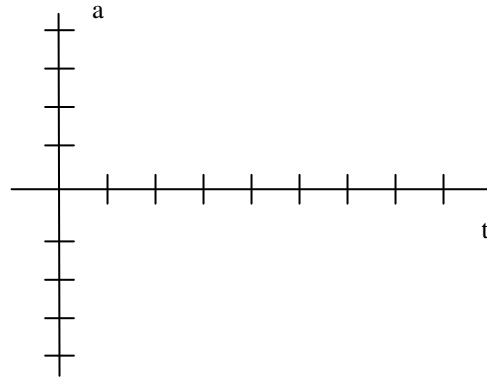
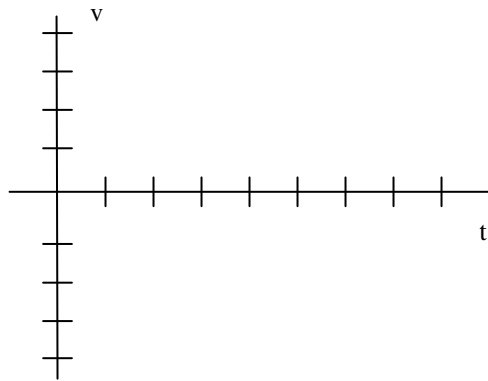
Questions 2-4 refer to the block on a flat surface shown below. A force F is applied to the block as shown. With an applied force of 2.5 N, the block moves with a constant velocity.



2. Explain how the block can move with a constant velocity even though it has a force applied to it. Is Newton's first law violated?

3. The block is now moving with a constant velocity that is twice as large as before. Approximately what applied force is needed to keep the block moving with this larger constant velocity? Explain.

4. Suppose that a constant force F of 5.0 N is applied to the block. Sketch below the shape of the velocity-time and acceleration-time graphs for the block.



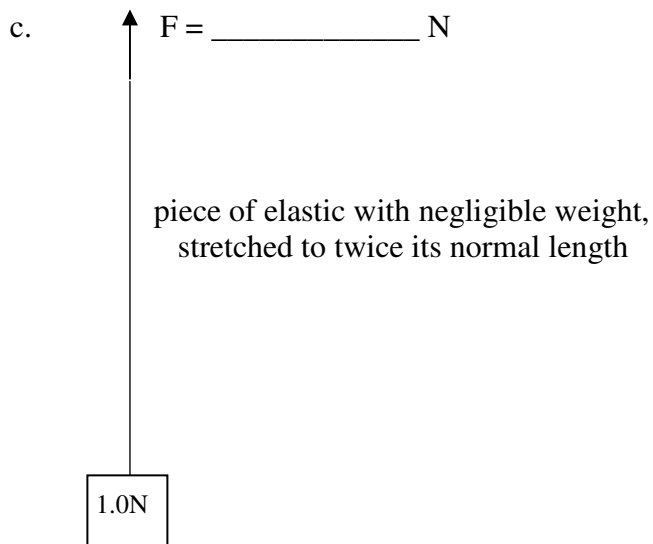
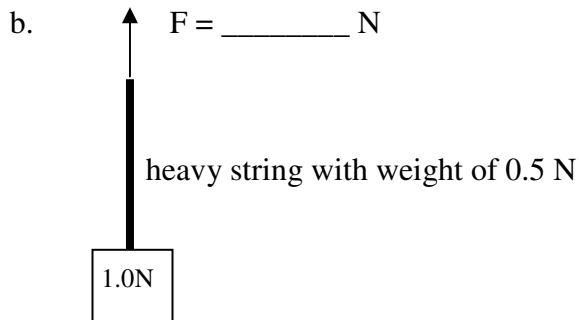
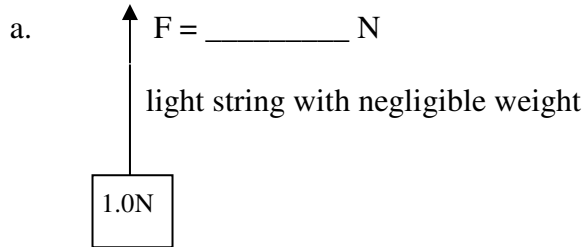
5. Using your data from the last investigation, determine the values for the coefficient of kinetic friction between the block and the ramp for each of the masses you used. Show your work (including your raw data) below or on a separate page. Include an estimate of the uncertainty. Report your results in an appropriate way (properly rounded, with units). Are your results reasonable? Do the results indicate that the coefficient of kinetic friction is the same for the three masses, as our simple model says it should be, since it should depend only on the materials involved?

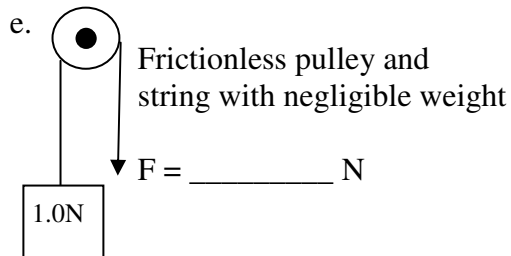
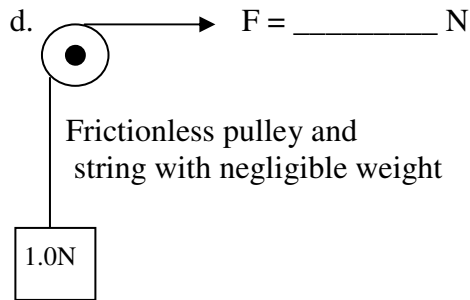
|

Physics 200B Lab 6 homework

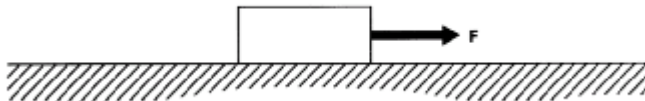
Name: _____

1. A 1.0-N weight is hanging at rest as shown. In each case, write in the magnitude of the unknown force. Explain the reasoning for each of your answers.





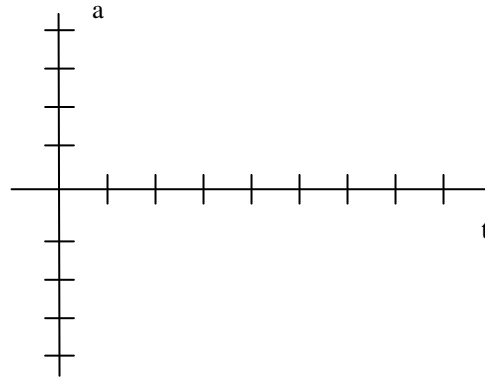
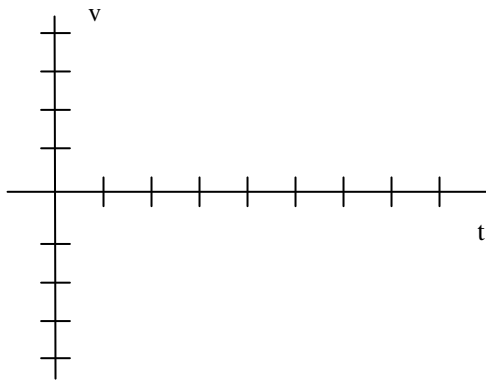
Questions 2-4 refer to the block on a flat surface shown below. A force F is applied to the block as shown. With an applied force of 2.5 N, the block moves with a constant velocity.



2. Explain how the block can move with a constant velocity even though it has a force applied to it. Is Newton's first law violated?

3. The block is now moving with a constant velocity that is twice as large as before. Approximately what applied force is needed to keep the block moving with this larger constant velocity? Explain.

4. Suppose that a constant force F of 5.0 N is applied to the block. Sketch below the shape of the velocity-time and acceleration-time graphs for the block.



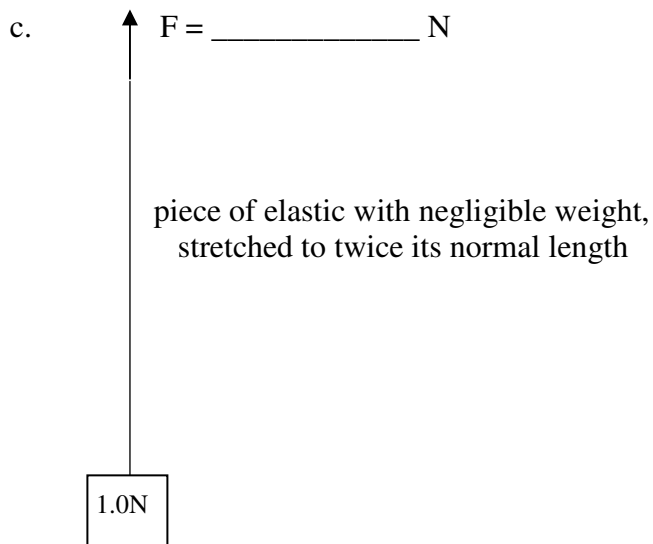
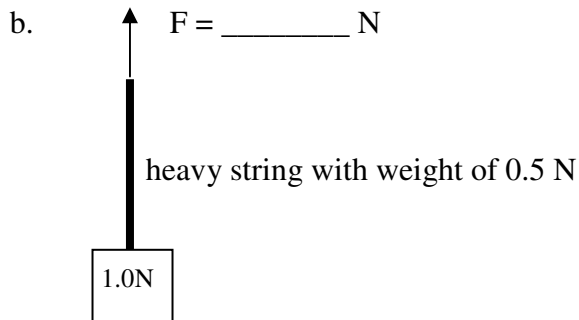
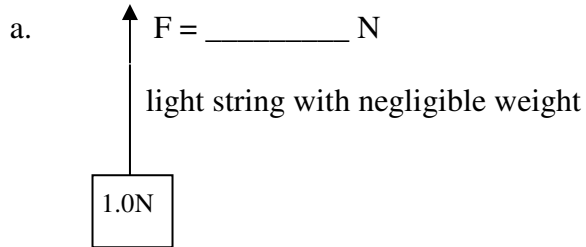
5. Using your data from the last investigation, determine the values for the coefficient of kinetic friction between the block and the ramp for each of the masses you used. Show your work (including your raw data) below or on a separate page. Include an estimate of the uncertainty. Report your results in an appropriate way (properly rounded, with units). Are your results reasonable? Do the results indicate that the coefficient of kinetic friction is the same for the three masses, as our simple model says it should be, since it should depend only on the materials involved?

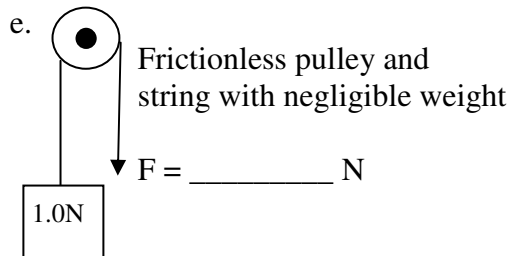
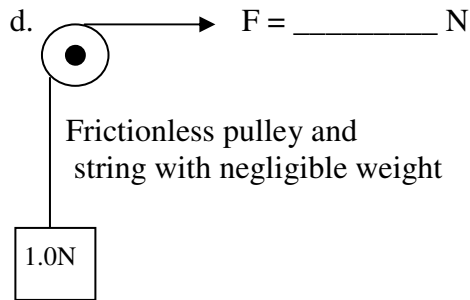
|

Physics 200B Lab 6 homework

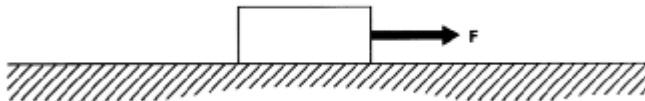
Name: _____

1. A 1.0-N weight is hanging at rest as shown. In each case, write in the magnitude of the unknown force. Explain the reasoning for each of your answers.





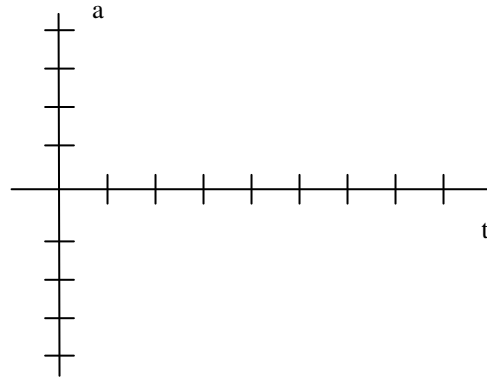
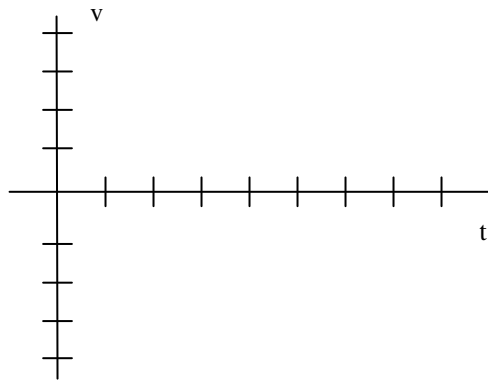
Questions 2-4 refer to the block on a flat surface shown below. A force F is applied to the block as shown. With an applied force of 2.5 N, the block moves with a constant velocity.



2. Explain how the block can move with a constant velocity even though it has a force applied to it. Is Newton's first law violated?

3. The block is now moving with a constant velocity that is twice as large as before. Approximately what applied force is needed to keep the block moving with this larger constant velocity? Explain.

4. Suppose that a constant force F of 5.0 N is applied to the block. Sketch below the shape of the velocity-time and acceleration-time graphs for the block.



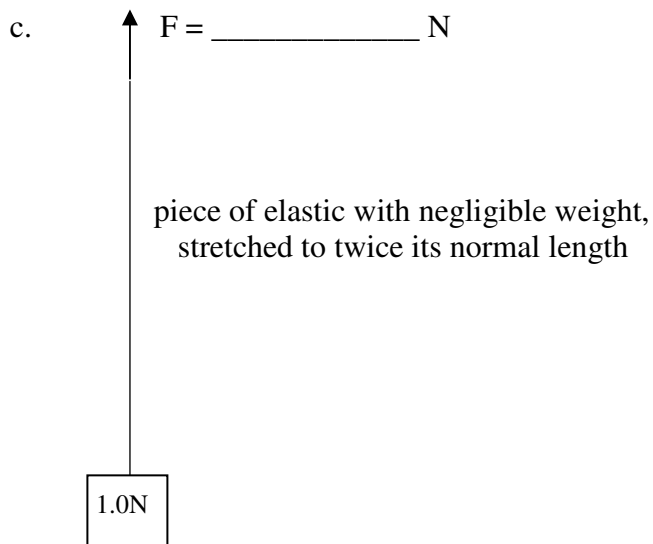
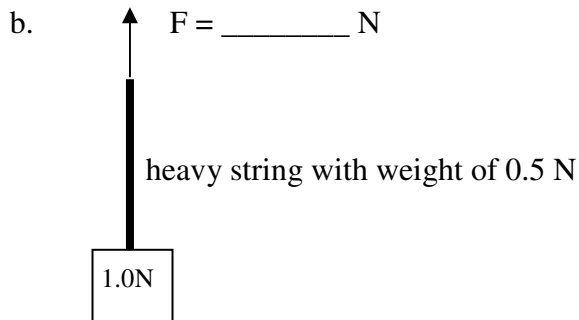
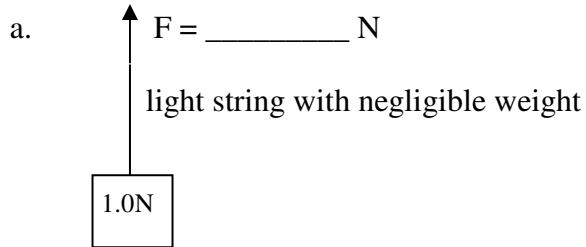
5. Using your data from the last investigation, determine the values for the coefficient of kinetic friction between the block and the ramp for each of the masses you used. Show your work (including your raw data) below or on a separate page. Include an estimate of the uncertainty. Report your results in an appropriate way (properly rounded, with units). Are your results reasonable? Do the results indicate that the coefficient of kinetic friction is the same for the three masses, as our simple model says it should be, since it should depend only on the materials involved?

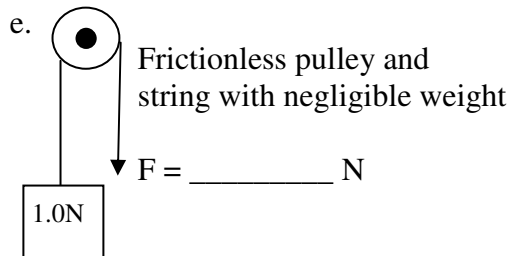
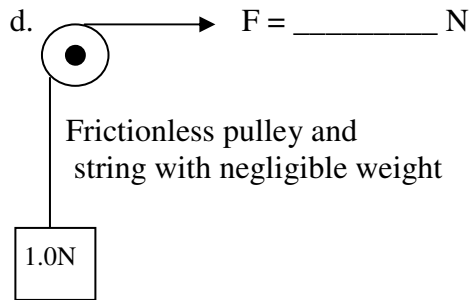
|

Physics 200B Lab 6 homework

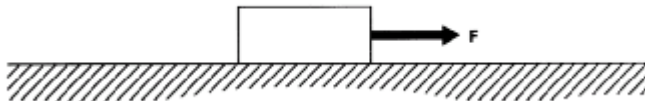
Name: _____

1. A 1.0-N weight is hanging at rest as shown. In each case, write in the magnitude of the unknown force. Explain the reasoning for each of your answers.





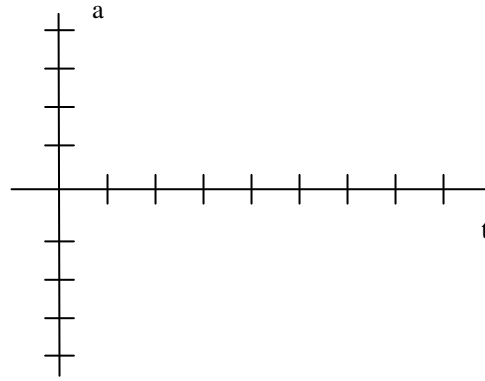
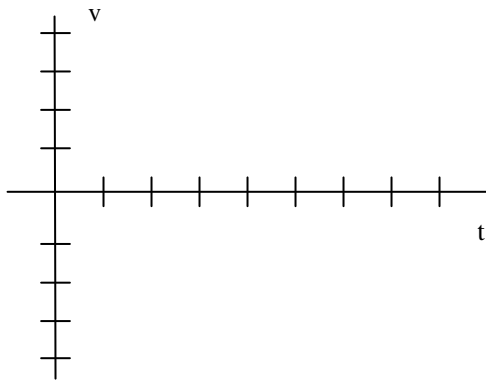
Questions 2-4 refer to the block on a flat surface shown below. A force F is applied to the block as shown. With an applied force of 2.5 N, the block moves with a constant velocity.



2. Explain how the block can move with a constant velocity even though it has a force applied to it. Is Newton's first law violated?

3. The block is now moving with a constant velocity that is twice as large as before. Approximately what applied force is needed to keep the block moving with this larger constant velocity? Explain.

4. Suppose that a constant force F of 5.0 N is applied to the block. Sketch below the shape of the velocity-time and acceleration-time graphs for the block.



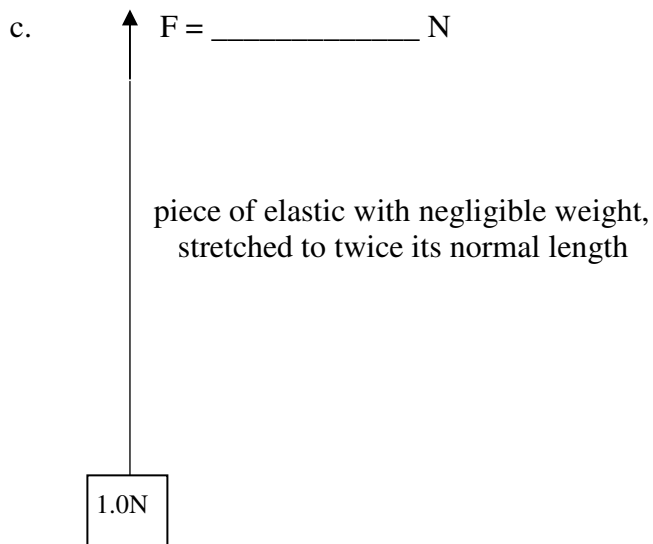
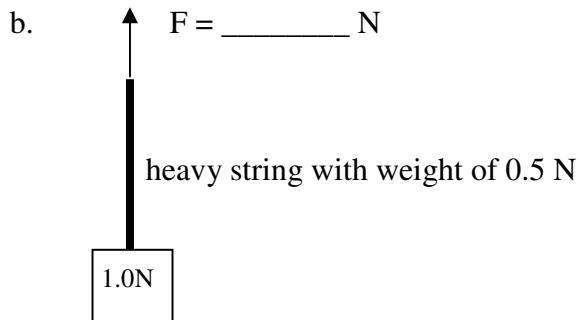
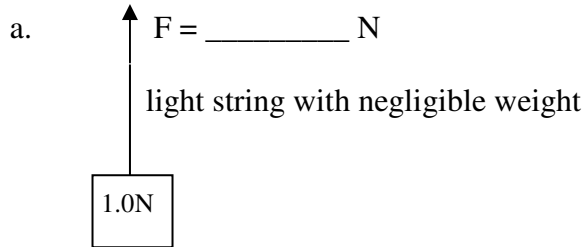
5. Using your data from the last investigation, determine the values for the coefficient of kinetic friction between the block and the ramp for each of the masses you used. Show your work (including your raw data) below or on a separate page. Include an estimate of the uncertainty. Report your results in an appropriate way (properly rounded, with units). Are your results reasonable? Do the results indicate that the coefficient of kinetic friction is the same for the three masses, as our simple model says it should be, since it should depend only on the materials involved?

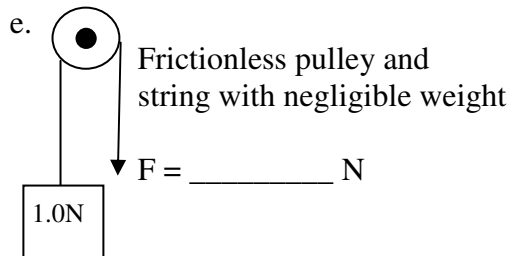
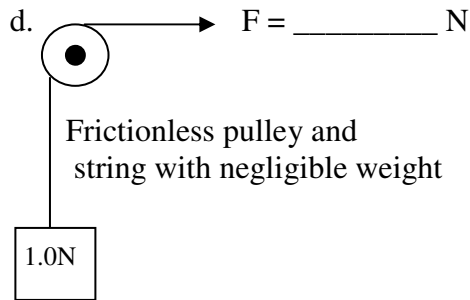
|

Physics 200B Lab 6 homework

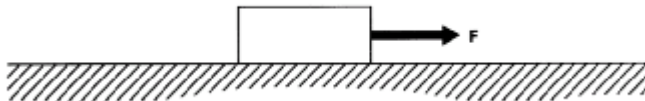
Name: _____

1. A 1.0-N weight is hanging at rest as shown. In each case, write in the magnitude of the unknown force. Explain the reasoning for each of your answers.





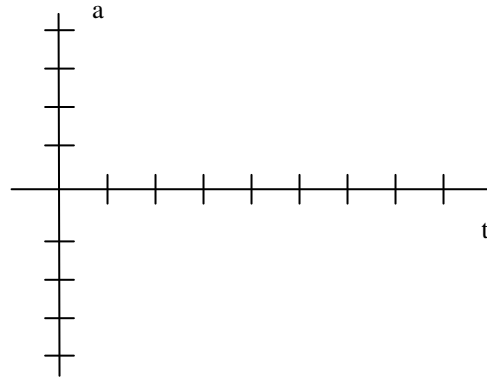
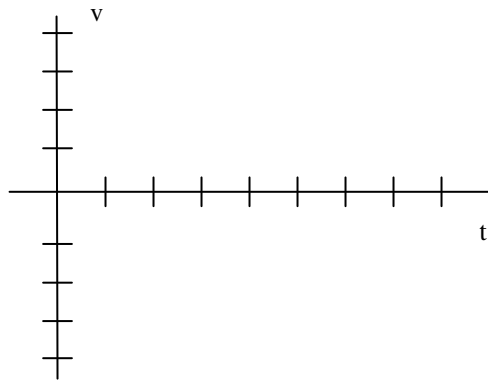
Questions 2-4 refer to the block on a flat surface shown below. A force F is applied to the block as shown. With an applied force of 2.5 N, the block moves with a constant velocity.



2. Explain how the block can move with a constant velocity even though it has a force applied to it. Is Newton's first law violated?

3. The block is now moving with a constant velocity that is twice as large as before. Approximately what applied force is needed to keep the block moving with this larger constant velocity? Explain.

4. Suppose that a constant force F of 5.0 N is applied to the block. Sketch below the shape of the velocity-time and acceleration-time graphs for the block.



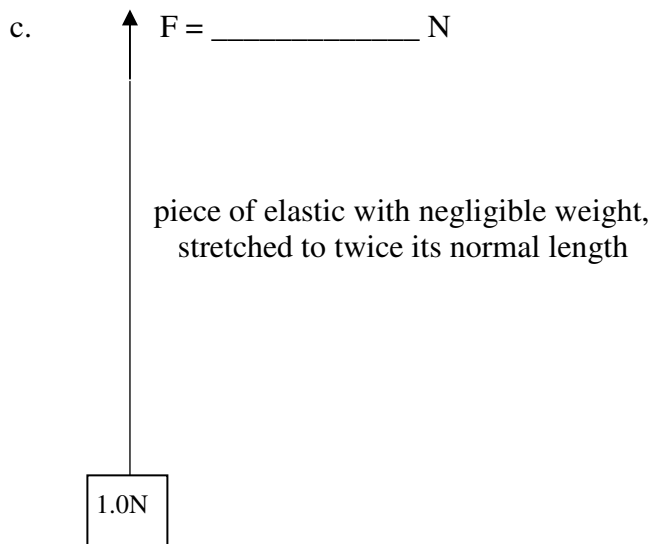
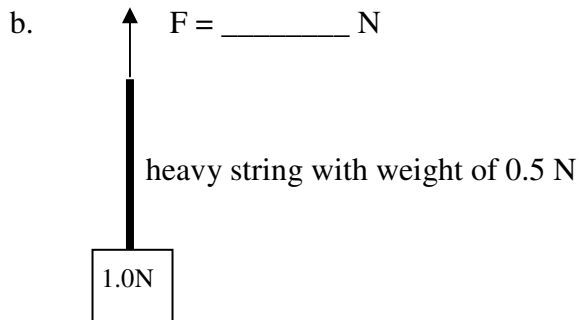
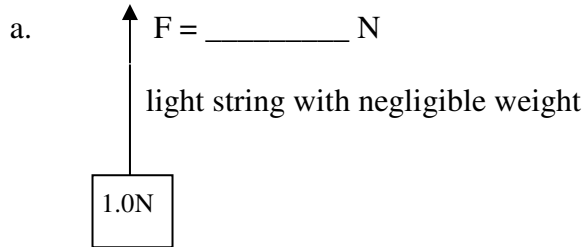
5. Using your data from the last investigation, determine the values for the coefficient of kinetic friction between the block and the ramp for each of the masses you used. Show your work (including your raw data) below or on a separate page. Include an estimate of the uncertainty. Report your results in an appropriate way (properly rounded, with units). Are your results reasonable? Do the results indicate that the coefficient of kinetic friction is the same for the three masses, as our simple model says it should be, since it should depend only on the materials involved?

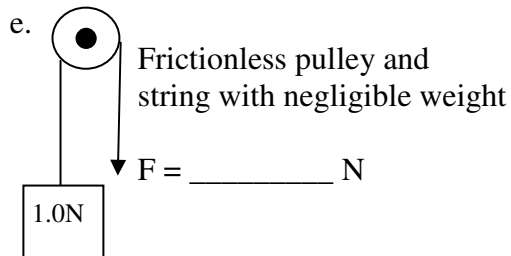
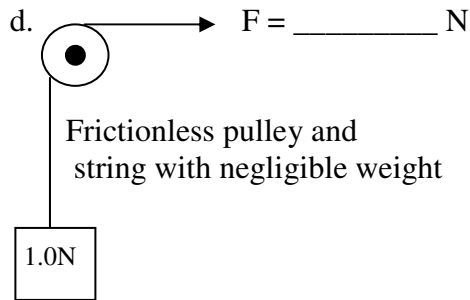
|

Physics 200B Lab 6 homework

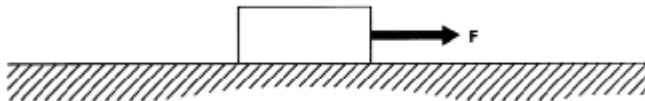
Name: _____

1. A 1.0-N weight is hanging at rest as shown. In each case, write in the magnitude of the unknown force. Explain the reasoning for each of your answers.





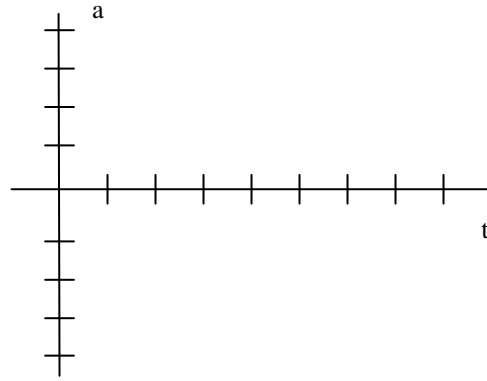
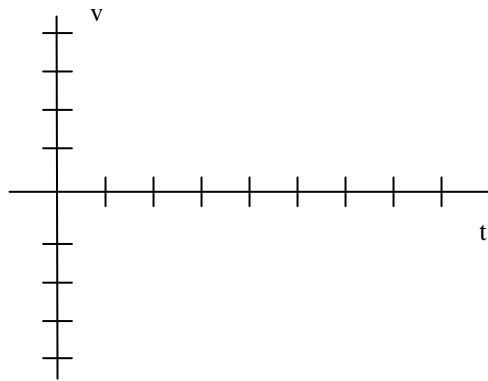
Questions 2-4 refer to the block on a flat surface shown below. A force F is applied to the block as shown. With an applied force of 2.5 N, the block moves with a constant velocity.



2. Explain how the block can move with a constant velocity even though it has a force applied to it. Is Newton's first law violated?

3. The block is now moving with a constant velocity that is twice as large as before. Approximately what applied force is needed to keep the block moving with this larger constant velocity? Explain.

4. Suppose that a constant force F of 5.0 N is applied to the block. Sketch below the shape of the velocity-time and acceleration-time graphs for the block.



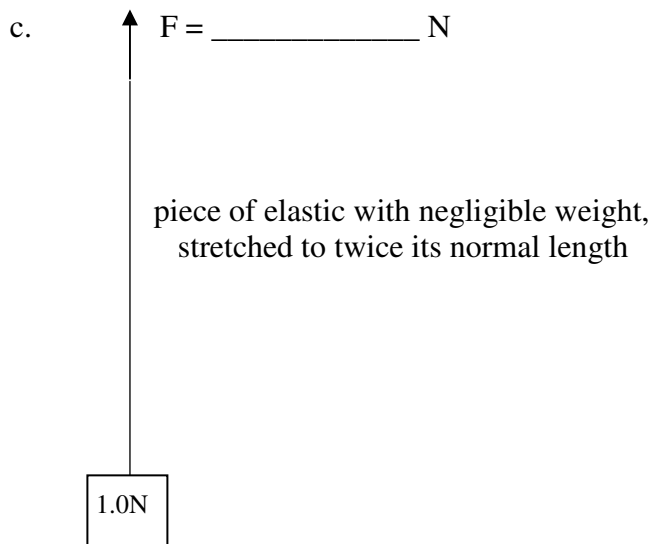
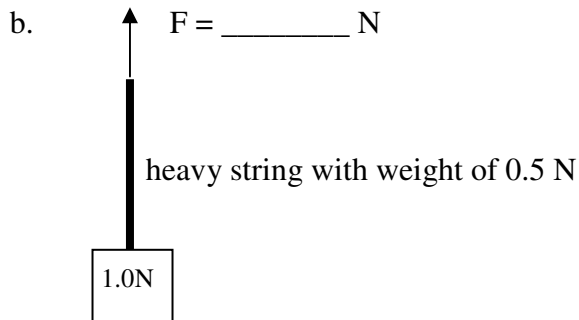
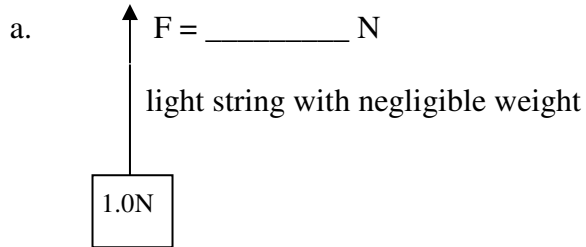
5. Using your data from the last investigation, determine the values for the coefficient of kinetic friction between the block and the ramp for each of the masses you used. Show your work (including your raw data) below or on a separate page. Include an estimate of the uncertainty. Report your results in an appropriate way (properly rounded, with units). Are your results reasonable? Do the results indicate that the coefficient of kinetic friction is the same for the three masses, as our simple model says it should be, since it should depend only on the materials involved?

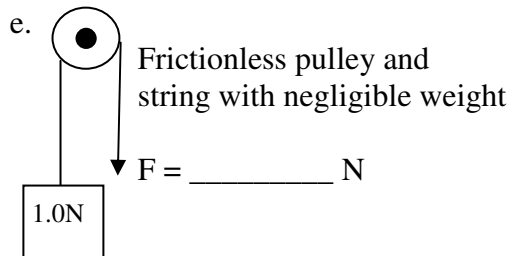
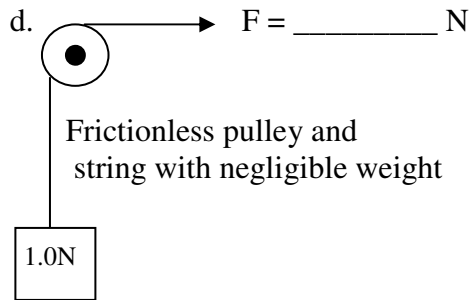
|

Physics 200B Lab 6 homework

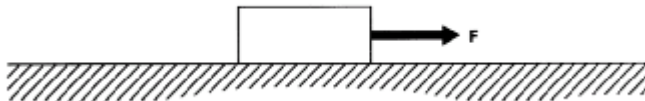
Name: _____

1. A 1.0-N weight is hanging at rest as shown. In each case, write in the magnitude of the unknown force. Explain the reasoning for each of your answers.





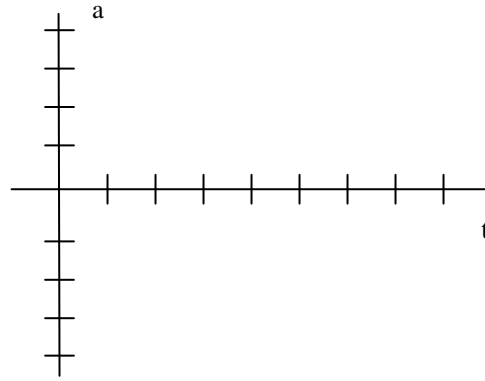
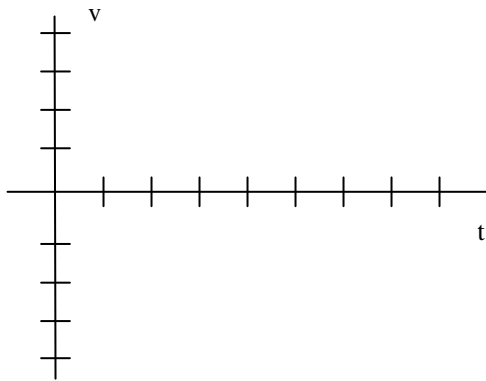
Questions 2-4 refer to the block on a flat surface shown below. A force F is applied to the block as shown. With an applied force of 2.5 N, the block moves with a constant velocity.



2. Explain how the block can move with a constant velocity even though it has a force applied to it. Is Newton's first law violated?

3. The block is now moving with a constant velocity that is twice as large as before. Approximately what applied force is needed to keep the block moving with this larger constant velocity? Explain.

4. Suppose that a constant force F of 5.0 N is applied to the block. Sketch below the shape of the velocity-time and acceleration-time graphs for the block.



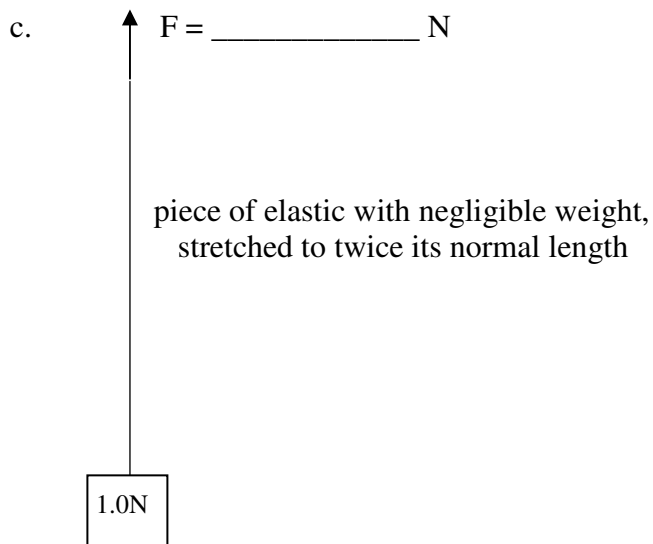
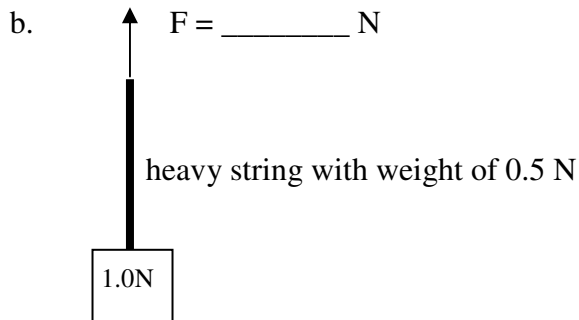
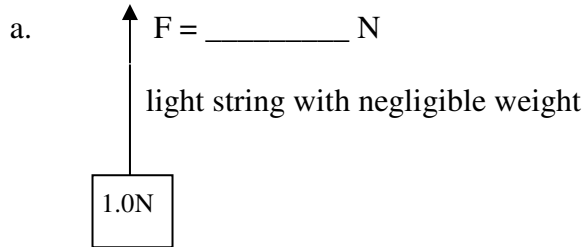
5. Using your data from the last investigation, determine the values for the coefficient of kinetic friction between the block and the ramp for each of the masses you used. Show your work (including your raw data) below or on a separate page. Include an estimate of the uncertainty. Report your results in an appropriate way (properly rounded, with units). Are your results reasonable? Do the results indicate that the coefficient of kinetic friction is the same for the three masses, as our simple model says it should be, since it should depend only on the materials involved?

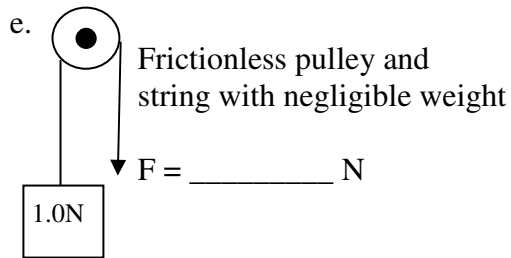
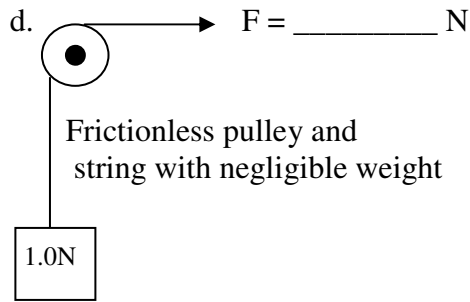
|

Physics 200B Lab 6 homework

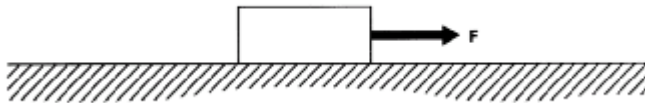
Name: _____

1. A 1.0-N weight is hanging at rest as shown. In each case, write in the magnitude of the unknown force. Explain the reasoning for each of your answers.





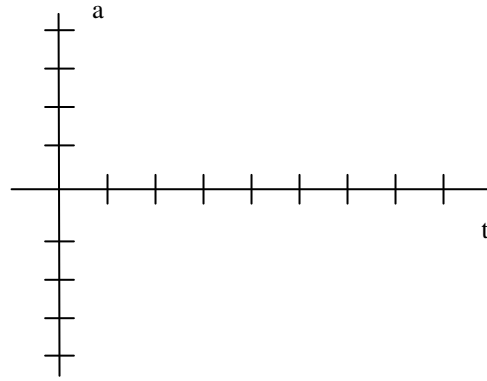
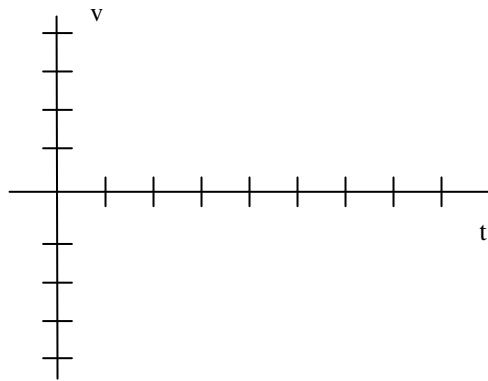
Questions 2-4 refer to the block on a flat surface shown below. A force F is applied to the block as shown. With an applied force of 2.5 N, the block moves with a constant velocity.



2. Explain how the block can move with a constant velocity even though it has a force applied to it. Is Newton's first law violated?

3. The block is now moving with a constant velocity that is twice as large as before. Approximately what applied force is needed to keep the block moving with this larger constant velocity? Explain.

4. Suppose that a constant force F of 5.0 N is applied to the block. Sketch below the shape of the velocity-time and acceleration-time graphs for the block.



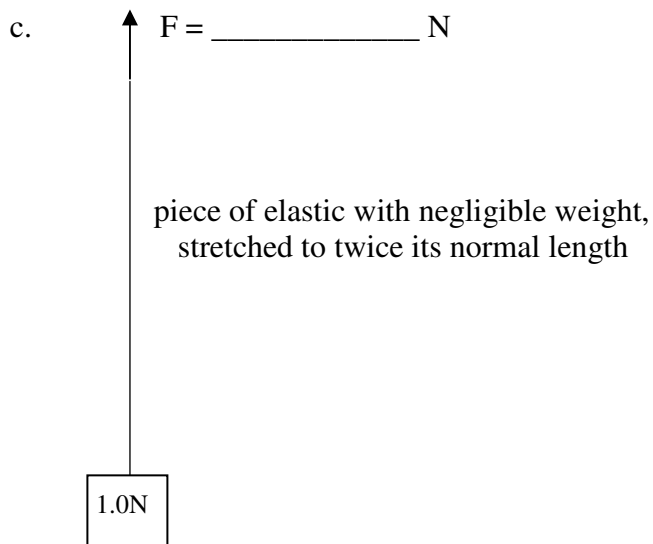
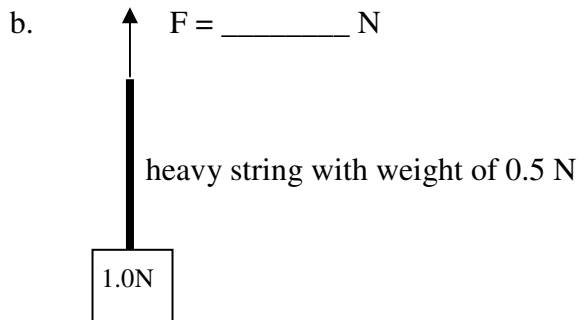
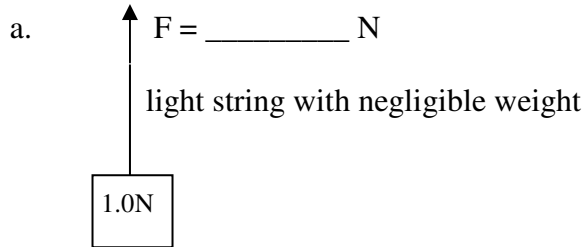
5. Using your data from the last investigation, determine the values for the coefficient of kinetic friction between the block and the ramp for each of the masses you used. Show your work (including your raw data) below or on a separate page. Include an estimate of the uncertainty. Report your results in an appropriate way (properly rounded, with units). Are your results reasonable? Do the results indicate that the coefficient of kinetic friction is the same for the three masses, as our simple model says it should be, since it should depend only on the materials involved?

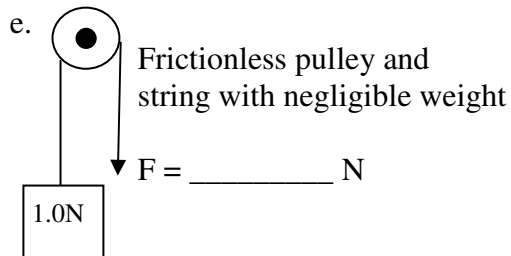
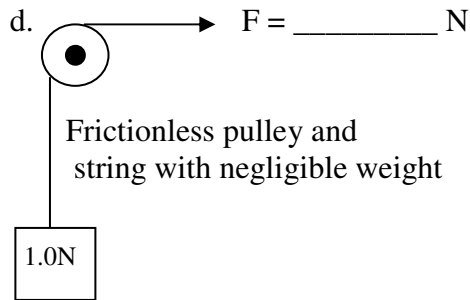
|

Physics 200B Lab 6 homework

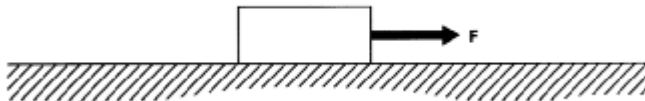
Name: _____

1. A 1.0-N weight is hanging at rest as shown. In each case, write in the magnitude of the unknown force. Explain the reasoning for each of your answers.





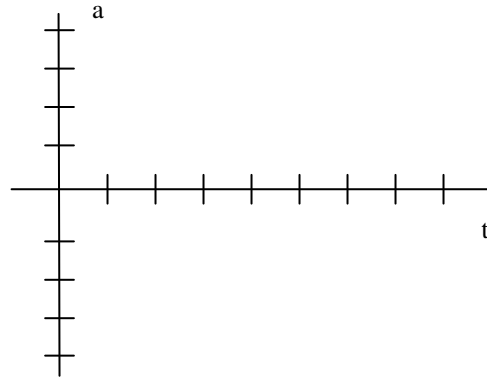
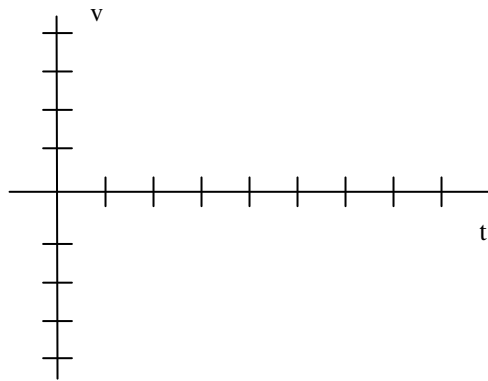
Questions 2-4 refer to the block on a flat surface shown below. A force F is applied to the block as shown. With an applied force of 2.5 N, the block moves with a constant velocity.



2. Explain how the block can move with a constant velocity even though it has a force applied to it. Is Newton's first law violated?

3. The block is now moving with a constant velocity that is twice as large as before. Approximately what applied force is needed to keep the block moving with this larger constant velocity? Explain.

4. Suppose that a constant force F of 5.0 N is applied to the block. Sketch below the shape of the velocity-time and acceleration-time graphs for the block.



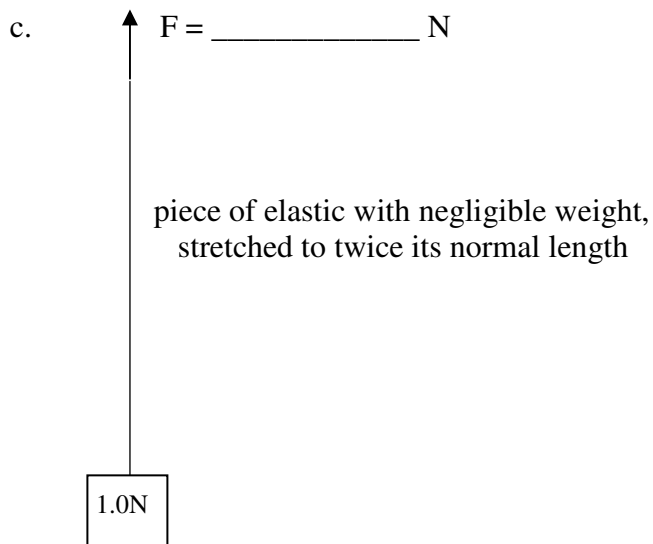
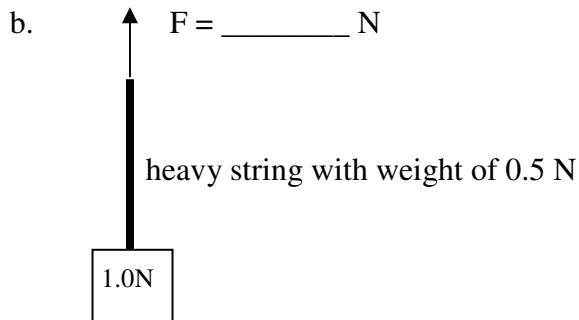
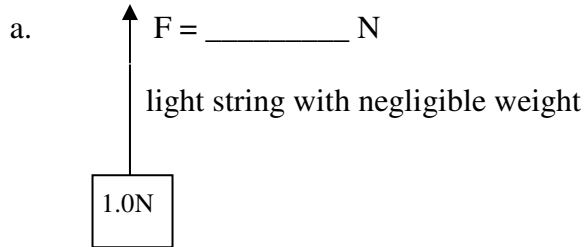
5. Using your data from the last investigation, determine the values for the coefficient of kinetic friction between the block and the ramp for each of the masses you used. Show your work (including your raw data) below or on a separate page. Include an estimate of the uncertainty. Report your results in an appropriate way (properly rounded, with units). Are your results reasonable? Do the results indicate that the coefficient of kinetic friction is the same for the three masses, as our simple model says it should be, since it should depend only on the materials involved?

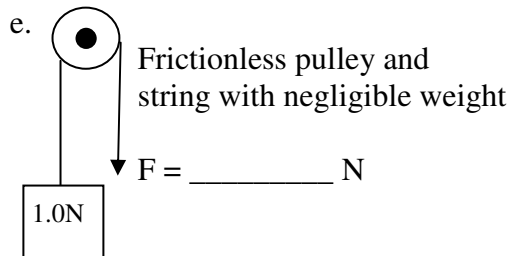
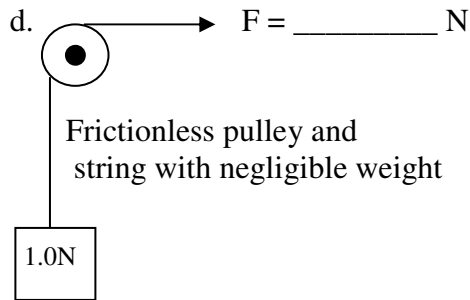
|

Physics 200B Lab 6 homework

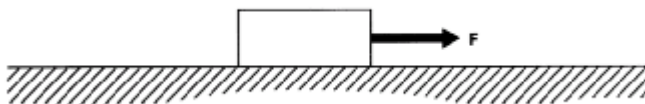
Name: _____

1. A 1.0-N weight is hanging at rest as shown. In each case, write in the magnitude of the unknown force. Explain the reasoning for each of your answers.





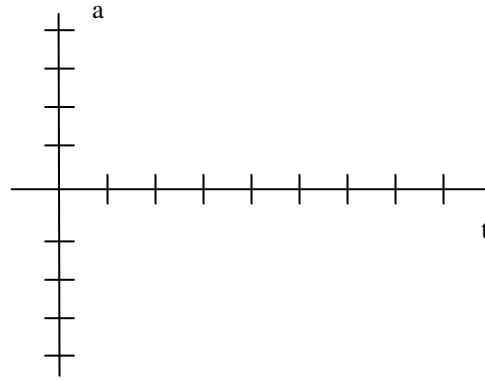
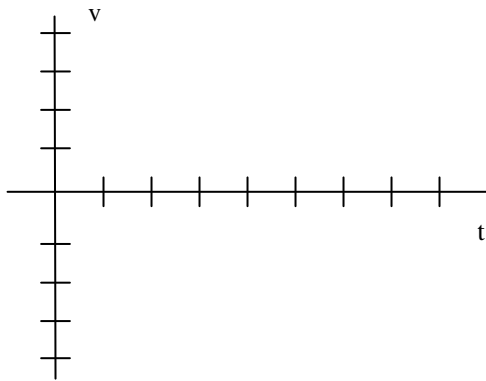
Questions 2-4 refer to the block on a flat surface shown below. A force F is applied to the block as shown. With an applied force of 2.5 N, the block moves with a constant velocity.



2. Explain how the block can move with a constant velocity even though it has a force applied to it. Is Newton's first law violated?

3. The block is now moving with a constant velocity that is twice as large as before. Approximately what applied force is needed to keep the block moving with this larger constant velocity? Explain.

4. Suppose that a constant force F of 5.0 N is applied to the block. Sketch below the shape of the velocity-time and acceleration-time graphs for the block.



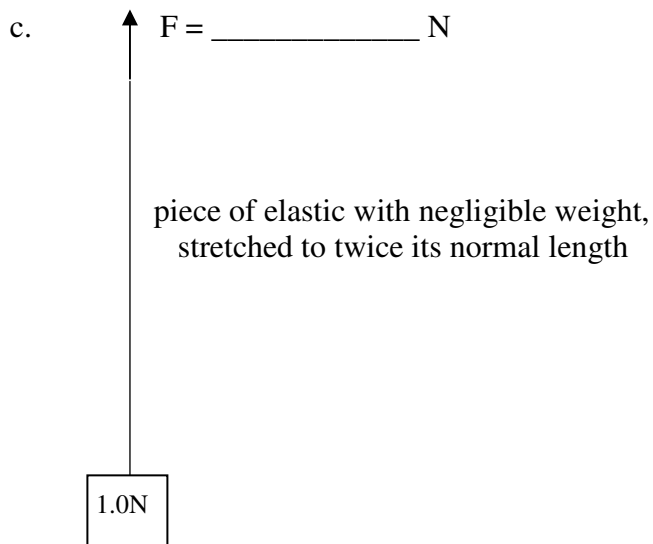
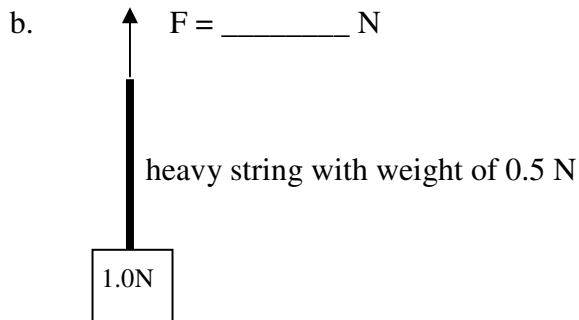
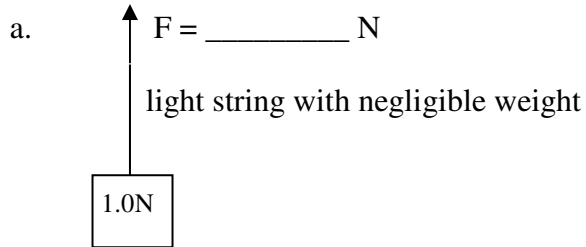
5. Using your data from the last investigation, determine the values for the coefficient of kinetic friction between the block and the ramp for each of the masses you used. Show your work (including your raw data) below or on a separate page. Include an estimate of the uncertainty. Report your results in an appropriate way (properly rounded, with units). Are your results reasonable? Do the results indicate that the coefficient of kinetic friction is the same for the three masses, as our simple model says it should be, since it should depend only on the materials involved?

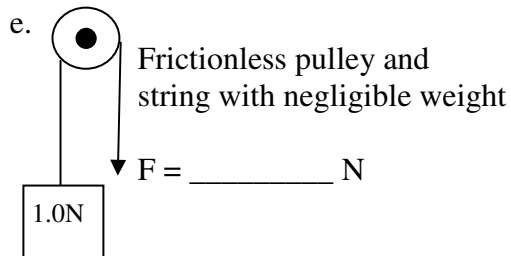
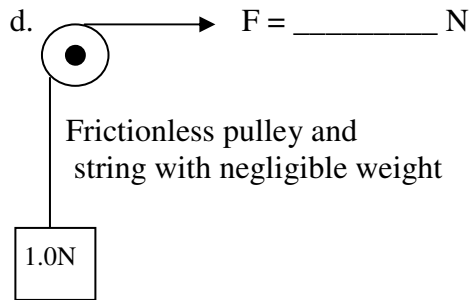
|

Physics 200B Lab 6 homework

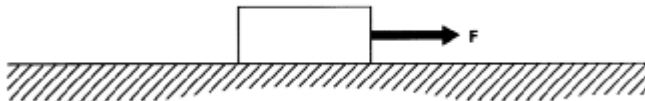
Name: _____

1. A 1.0-N weight is hanging at rest as shown. In each case, write in the magnitude of the unknown force. Explain the reasoning for each of your answers.





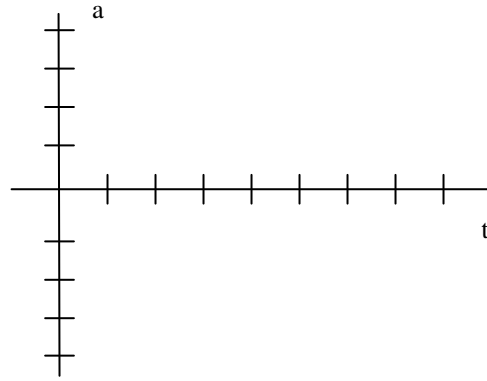
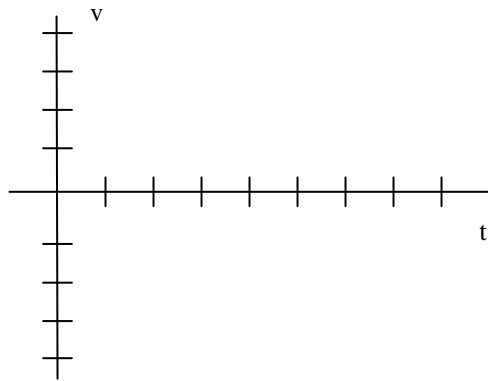
Questions 2-4 refer to the block on a flat surface shown below. A force F is applied to the block as shown. With an applied force of 2.5 N, the block moves with a constant velocity.



2. Explain how the block can move with a constant velocity even though it has a force applied to it. Is Newton's first law violated?

3. The block is now moving with a constant velocity that is twice as large as before. Approximately what applied force is needed to keep the block moving with this larger constant velocity? Explain.

4. Suppose that a constant force F of 5.0 N is applied to the block. Sketch below the shape of the velocity-time and acceleration-time graphs for the block.



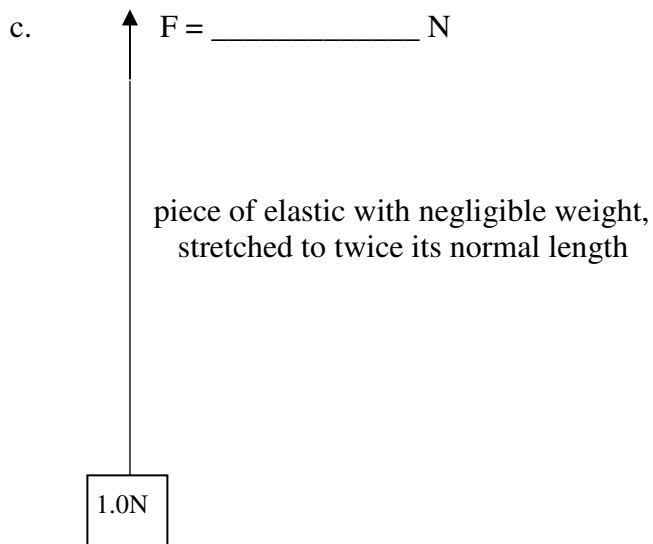
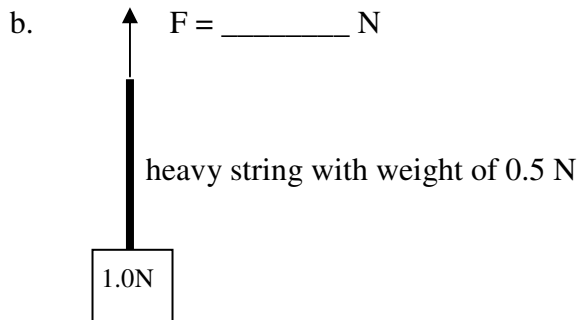
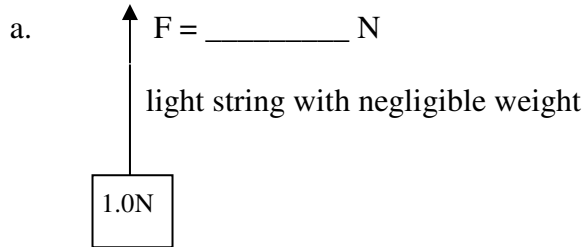
5. Using your data from the last investigation, determine the values for the coefficient of kinetic friction between the block and the ramp for each of the masses you used. Show your work (including your raw data) below or on a separate page. Include an estimate of the uncertainty. Report your results in an appropriate way (properly rounded, with units). Are your results reasonable? Do the results indicate that the coefficient of kinetic friction is the same for the three masses, as our simple model says it should be, since it should depend only on the materials involved?

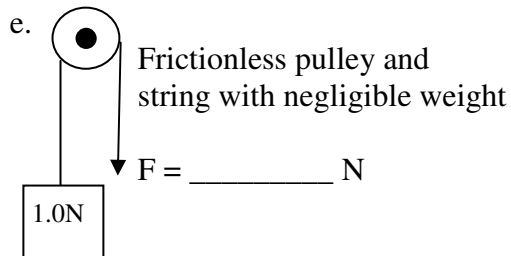
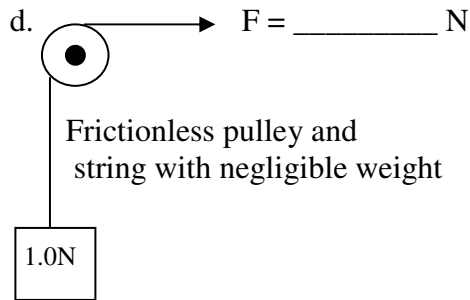
|

Physics 200B Lab 6 homework

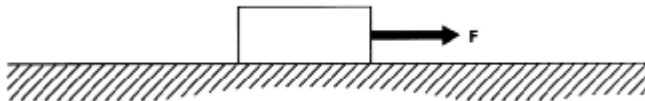
Name: _____

1. A 1.0-N weight is hanging at rest as shown. In each case, write in the magnitude of the unknown force. Explain the reasoning for each of your answers.





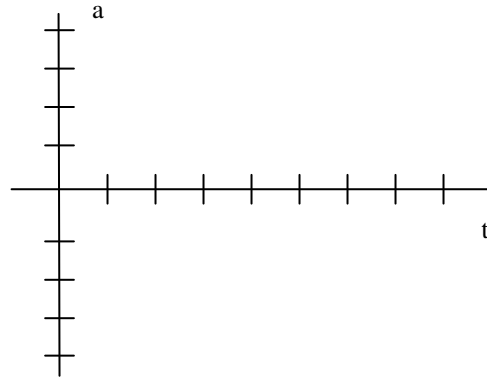
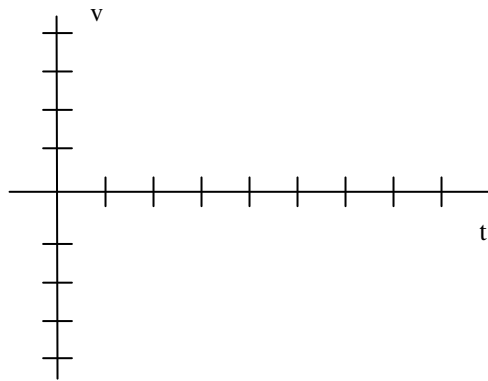
Questions 2-4 refer to the block on a flat surface shown below. A force F is applied to the block as shown. With an applied force of 2.5 N, the block moves with a constant velocity.



2. Explain how the block can move with a constant velocity even though it has a force applied to it. Is Newton's first law violated?

3. The block is now moving with a constant velocity that is twice as large as before. Approximately what applied force is needed to keep the block moving with this larger constant velocity? Explain.

4. Suppose that a constant force F of 5.0 N is applied to the block. Sketch below the shape of the velocity-time and acceleration-time graphs for the block.



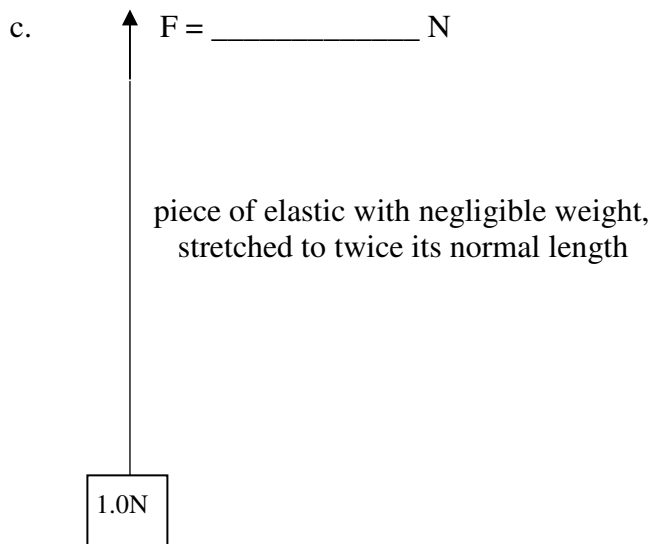
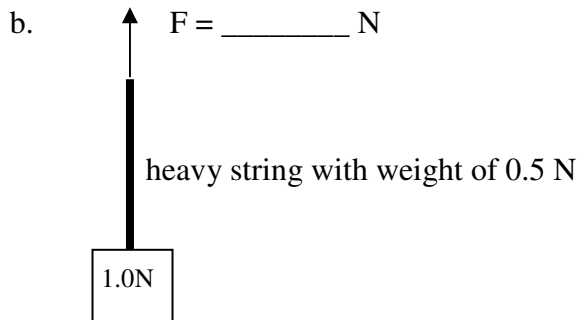
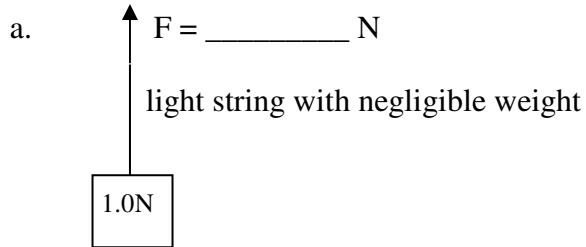
5. Using your data from the last investigation, determine the values for the coefficient of kinetic friction between the block and the ramp for each of the masses you used. Show your work (including your raw data) below or on a separate page. Include an estimate of the uncertainty. Report your results in an appropriate way (properly rounded, with units). Are your results reasonable? Do the results indicate that the coefficient of kinetic friction is the same for the three masses, as our simple model says it should be, since it should depend only on the materials involved?

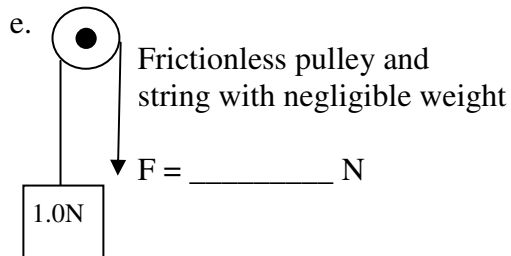
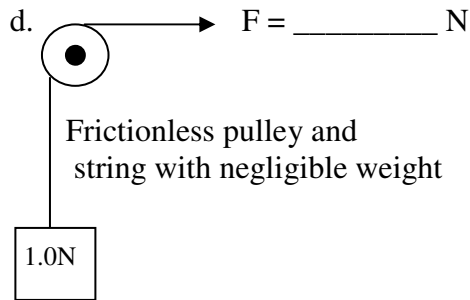
|

Physics 200B Lab 6 homework

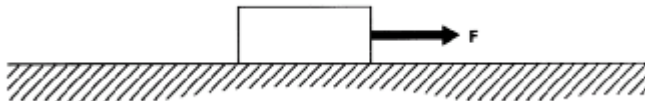
Name: _____

1. A 1.0-N weight is hanging at rest as shown. In each case, write in the magnitude of the unknown force. Explain the reasoning for each of your answers.





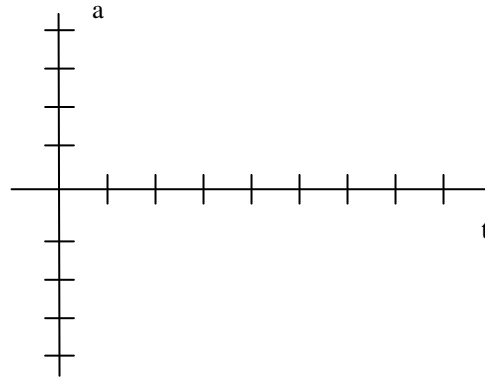
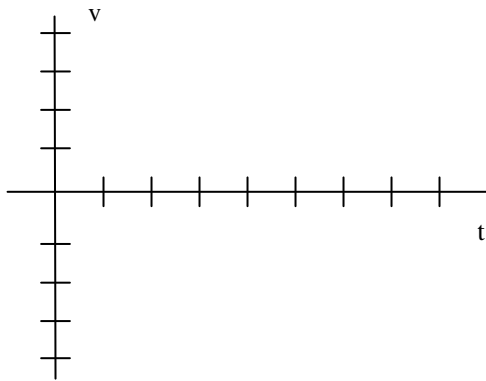
Questions 2-4 refer to the block on a flat surface shown below. A force F is applied to the block as shown. With an applied force of 2.5 N, the block moves with a constant velocity.



2. Explain how the block can move with a constant velocity even though it has a force applied to it. Is Newton's first law violated?

3. The block is now moving with a constant velocity that is twice as large as before. Approximately what applied force is needed to keep the block moving with this larger constant velocity? Explain.

4. Suppose that a constant force F of 5.0 N is applied to the block. Sketch below the shape of the velocity-time and acceleration-time graphs for the block.



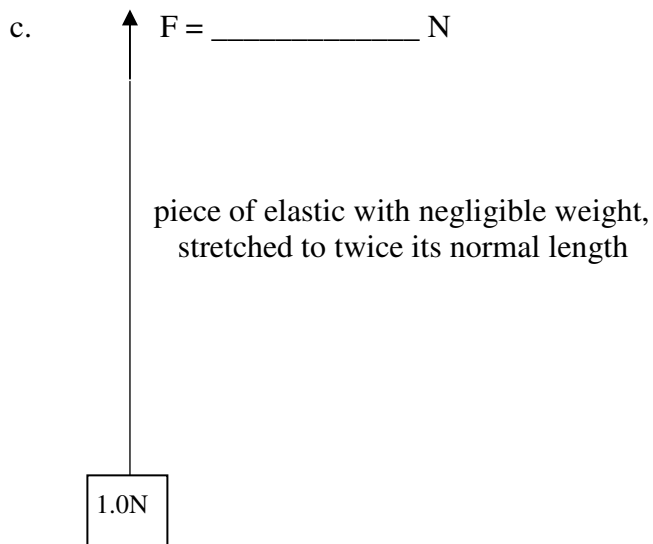
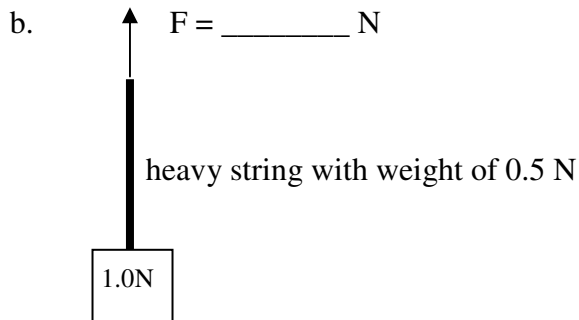
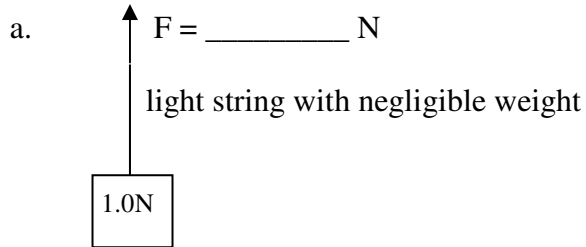
5. Using your data from the last investigation, determine the values for the coefficient of kinetic friction between the block and the ramp for each of the masses you used. Show your work (including your raw data) below or on a separate page. Include an estimate of the uncertainty. Report your results in an appropriate way (properly rounded, with units). Are your results reasonable? Do the results indicate that the coefficient of kinetic friction is the same for the three masses, as our simple model says it should be, since it should depend only on the materials involved?

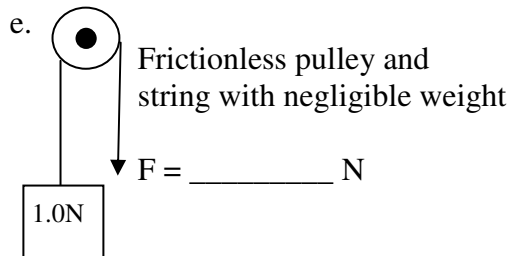
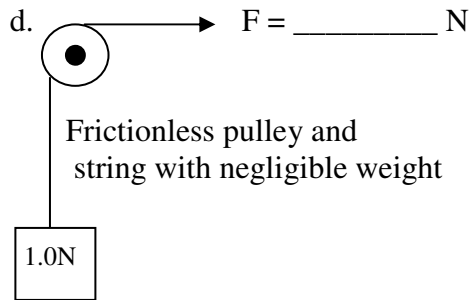
|

Physics 200B Lab 6 homework

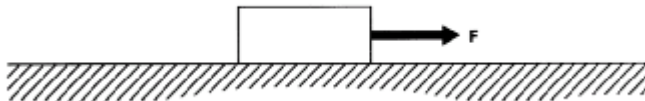
Name: _____

1. A 1.0-N weight is hanging at rest as shown. In each case, write in the magnitude of the unknown force. Explain the reasoning for each of your answers.





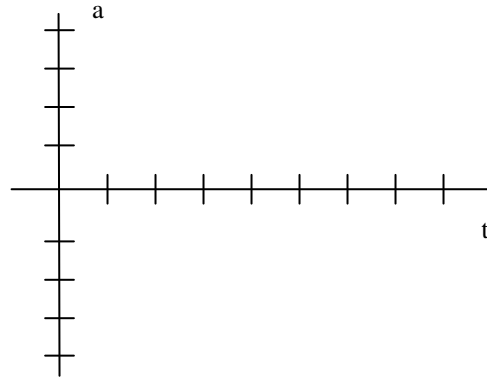
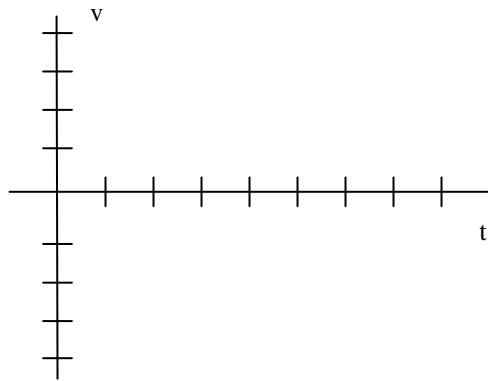
Questions 2-4 refer to the block on a flat surface shown below. A force F is applied to the block as shown. With an applied force of 2.5 N, the block moves with a constant velocity.



2. Explain how the block can move with a constant velocity even though it has a force applied to it. Is Newton's first law violated?

3. The block is now moving with a constant velocity that is twice as large as before. Approximately what applied force is needed to keep the block moving with this larger constant velocity? Explain.

4. Suppose that a constant force F of 5.0 N is applied to the block. Sketch below the shape of the velocity-time and acceleration-time graphs for the block.



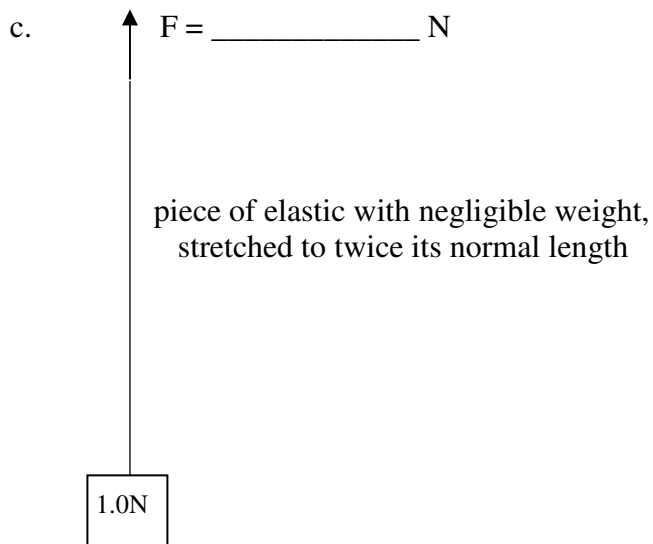
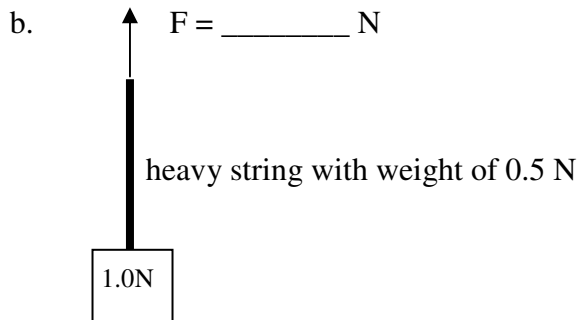
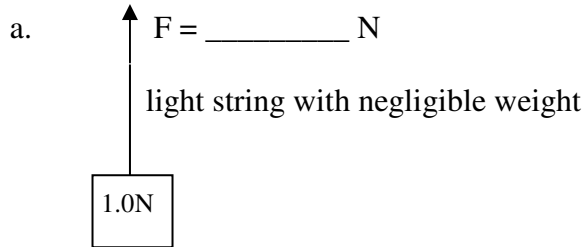
5. Using your data from the last investigation, determine the values for the coefficient of kinetic friction between the block and the ramp for each of the masses you used. Show your work (including your raw data) below or on a separate page. Include an estimate of the uncertainty. Report your results in an appropriate way (properly rounded, with units). Are your results reasonable? Do the results indicate that the coefficient of kinetic friction is the same for the three masses, as our simple model says it should be, since it should depend only on the materials involved?

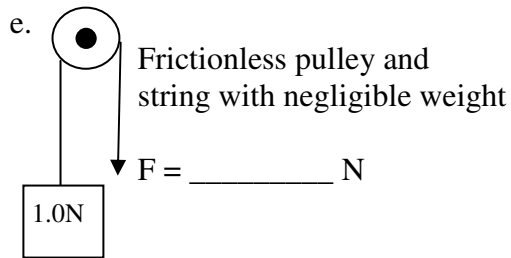
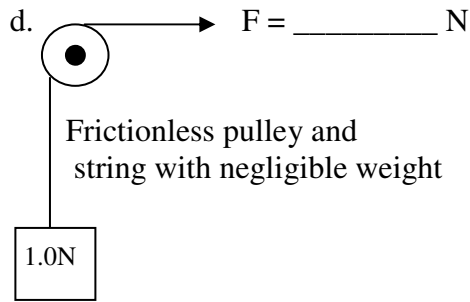
|

Physics 200B Lab 6 homework

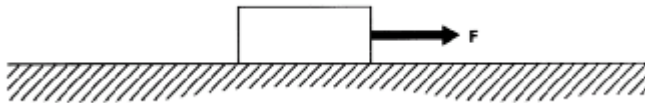
Name: _____

1. A 1.0-N weight is hanging at rest as shown. In each case, write in the magnitude of the unknown force. Explain the reasoning for each of your answers.





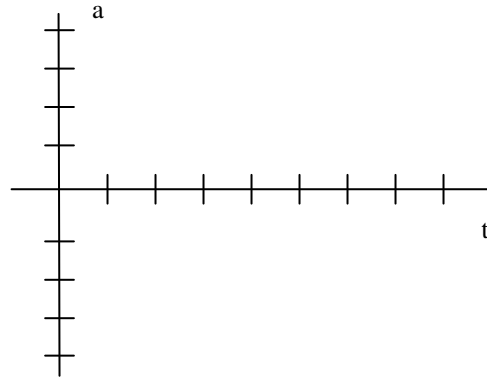
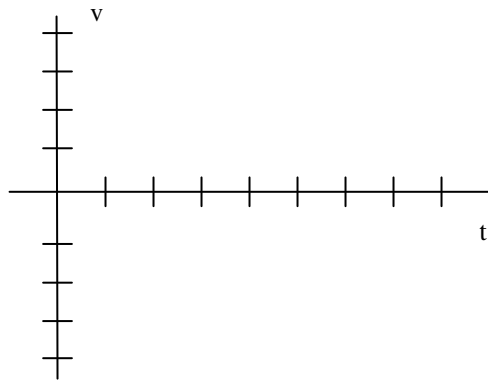
Questions 2-4 refer to the block on a flat surface shown below. A force F is applied to the block as shown. With an applied force of 2.5 N, the block moves with a constant velocity.



2. Explain how the block can move with a constant velocity even though it has a force applied to it. Is Newton's first law violated?

3. The block is now moving with a constant velocity that is twice as large as before. Approximately what applied force is needed to keep the block moving with this larger constant velocity? Explain.

4. Suppose that a constant force F of 5.0 N is applied to the block. Sketch below the shape of the velocity-time and acceleration-time graphs for the block.



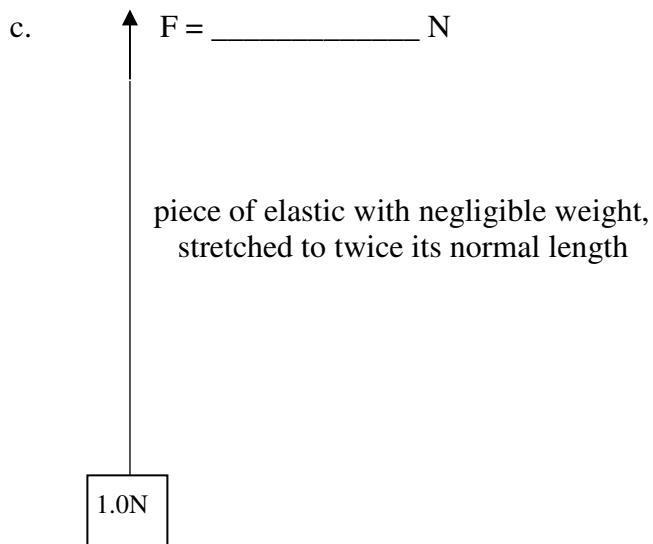
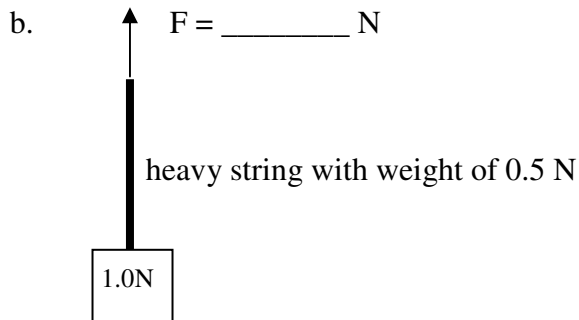
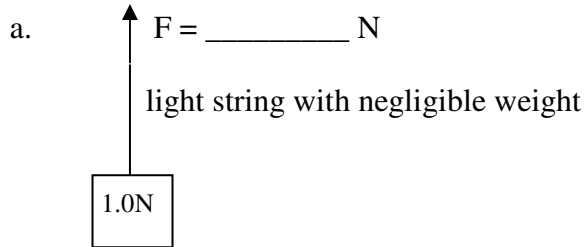
5. Using your data from the last investigation, determine the values for the coefficient of kinetic friction between the block and the ramp for each of the masses you used. Show your work (including your raw data) below or on a separate page. Include an estimate of the uncertainty. Report your results in an appropriate way (properly rounded, with units). Are your results reasonable? Do the results indicate that the coefficient of kinetic friction is the same for the three masses, as our simple model says it should be, since it should depend only on the materials involved?

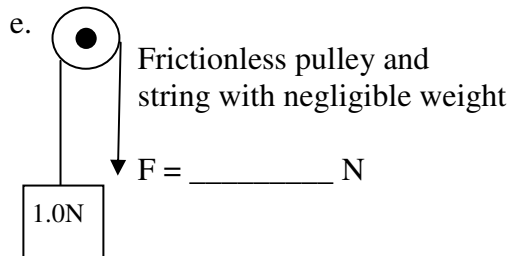
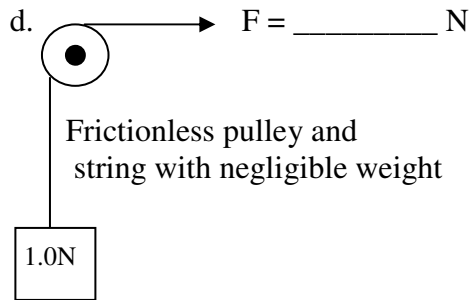
|

Physics 200B Lab 6 homework

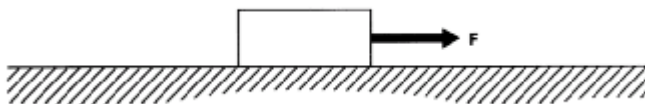
Name: _____

1. A 1.0-N weight is hanging at rest as shown. In each case, write in the magnitude of the unknown force. Explain the reasoning for each of your answers.





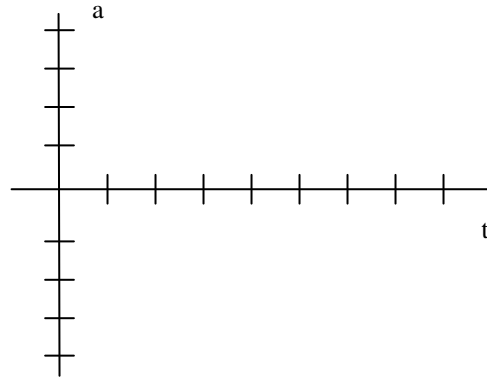
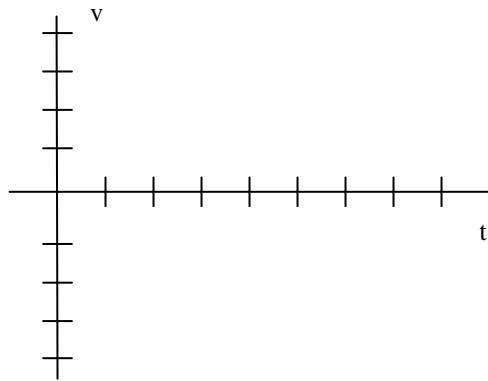
Questions 2-4 refer to the block on a flat surface shown below. A force F is applied to the block as shown. With an applied force of 2.5 N, the block moves with a constant velocity.



2. Explain how the block can move with a constant velocity even though it has a force applied to it. Is Newton's first law violated?

3. The block is now moving with a constant velocity that is twice as large as before. Approximately what applied force is needed to keep the block moving with this larger constant velocity? Explain.

4. Suppose that a constant force F of 5.0 N is applied to the block. Sketch below the shape of the velocity-time and acceleration-time graphs for the block.



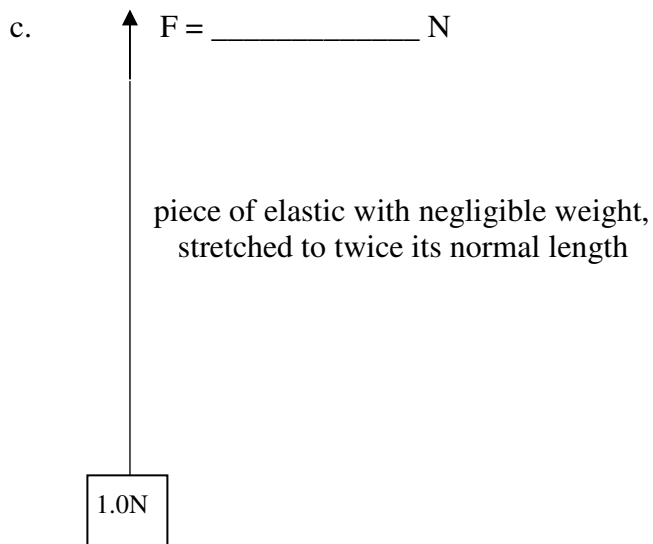
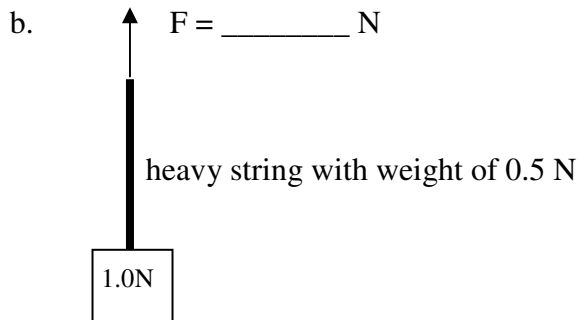
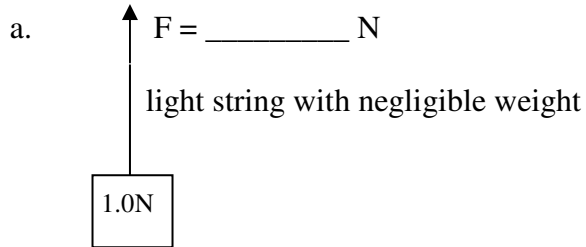
5. Using your data from the last investigation, determine the values for the coefficient of kinetic friction between the block and the ramp for each of the masses you used. Show your work (including your raw data) below or on a separate page. Include an estimate of the uncertainty. Report your results in an appropriate way (properly rounded, with units). Are your results reasonable? Do the results indicate that the coefficient of kinetic friction is the same for the three masses, as our simple model says it should be, since it should depend only on the materials involved?

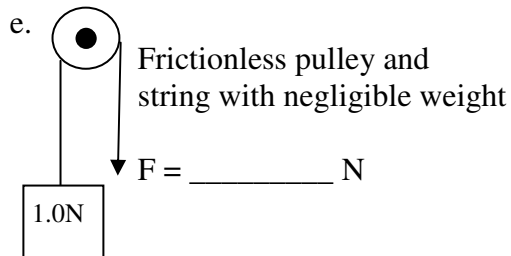
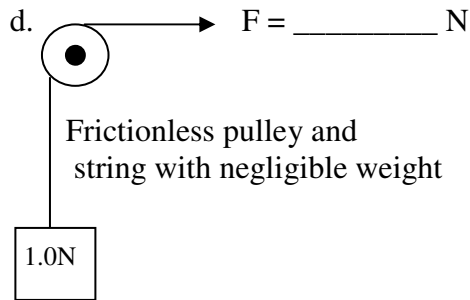
|

Physics 200B Lab 6 homework

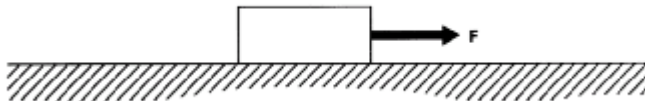
Name: _____

1. A 1.0-N weight is hanging at rest as shown. In each case, write in the magnitude of the unknown force. Explain the reasoning for each of your answers.





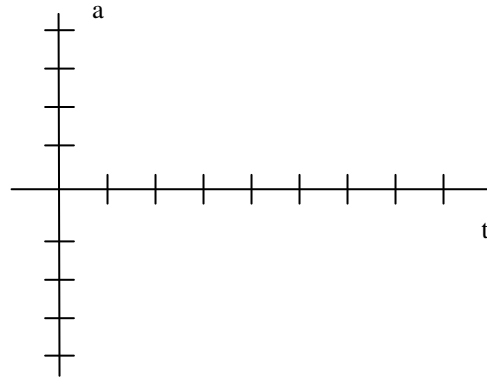
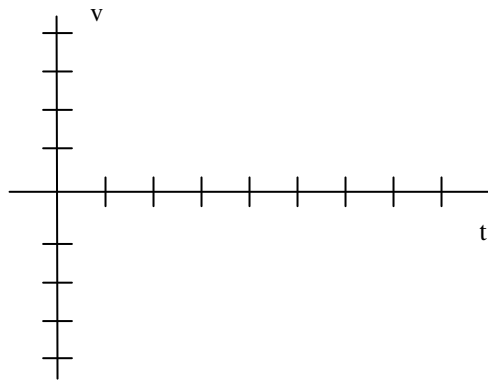
Questions 2-4 refer to the block on a flat surface shown below. A force F is applied to the block as shown. With an applied force of 2.5 N, the block moves with a constant velocity.



2. Explain how the block can move with a constant velocity even though it has a force applied to it. Is Newton's first law violated?

3. The block is now moving with a constant velocity that is twice as large as before. Approximately what applied force is needed to keep the block moving with this larger constant velocity? Explain.

4. Suppose that a constant force F of 5.0 N is applied to the block. Sketch below the shape of the velocity-time and acceleration-time graphs for the block.



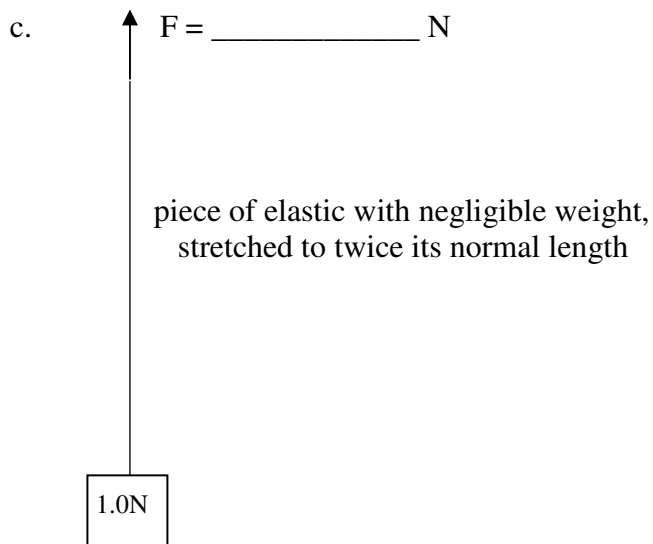
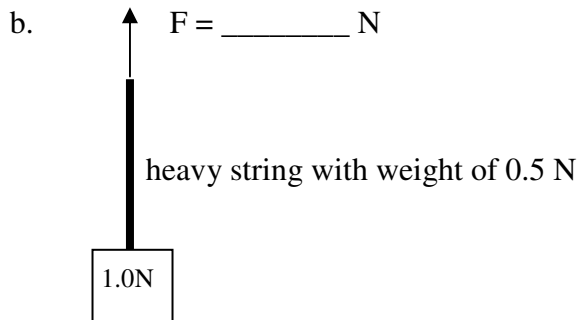
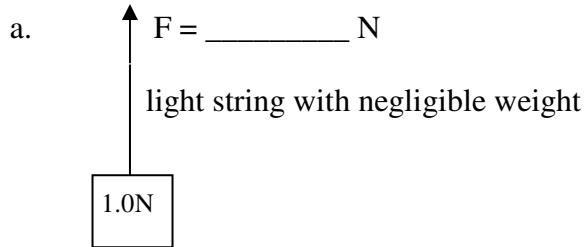
5. Using your data from the last investigation, determine the values for the coefficient of kinetic friction between the block and the ramp for each of the masses you used. Show your work (including your raw data) below or on a separate page. Include an estimate of the uncertainty. Report your results in an appropriate way (properly rounded, with units). Are your results reasonable? Do the results indicate that the coefficient of kinetic friction is the same for the three masses, as our simple model says it should be, since it should depend only on the materials involved?

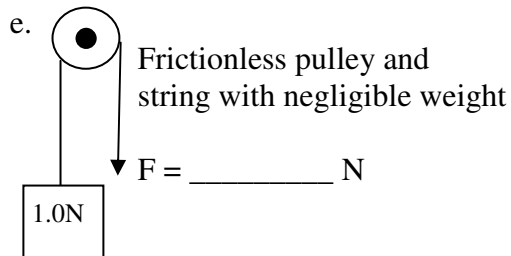
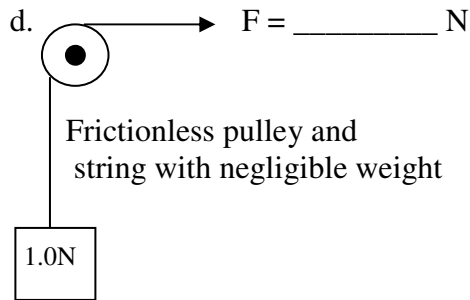
|

Physics 200B Lab 6 homework

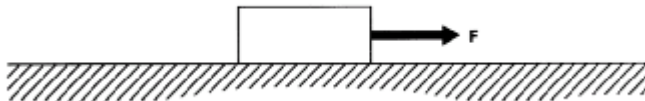
Name: _____

1. A 1.0-N weight is hanging at rest as shown. In each case, write in the magnitude of the unknown force. Explain the reasoning for each of your answers.





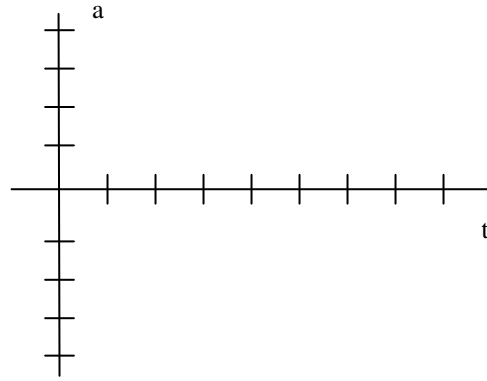
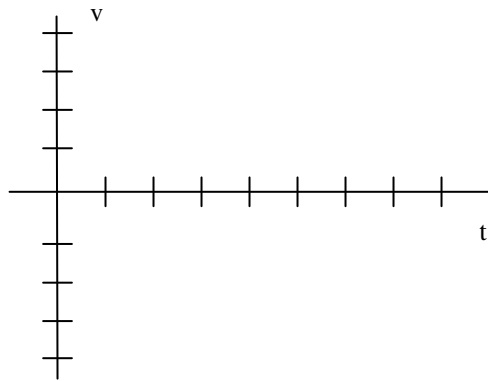
Questions 2-4 refer to the block on a flat surface shown below. A force F is applied to the block as shown. With an applied force of 2.5 N, the block moves with a constant velocity.



2. Explain how the block can move with a constant velocity even though it has a force applied to it. Is Newton's first law violated?

3. The block is now moving with a constant velocity that is twice as large as before. Approximately what applied force is needed to keep the block moving with this larger constant velocity? Explain.

4. Suppose that a constant force F of 5.0 N is applied to the block. Sketch below the shape of the velocity-time and acceleration-time graphs for the block.



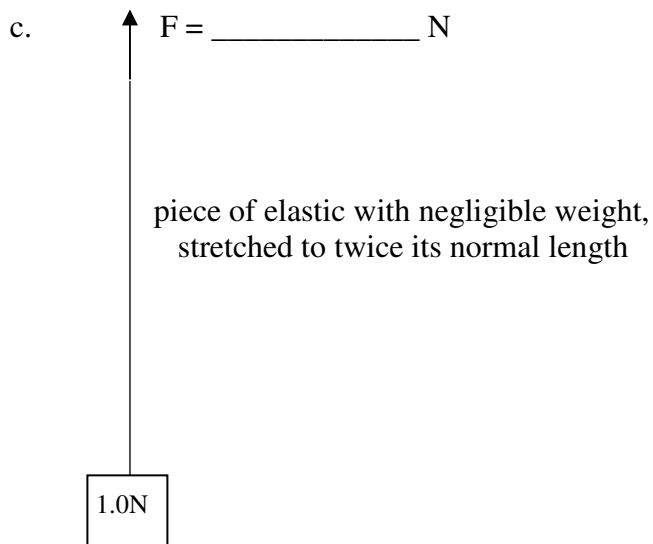
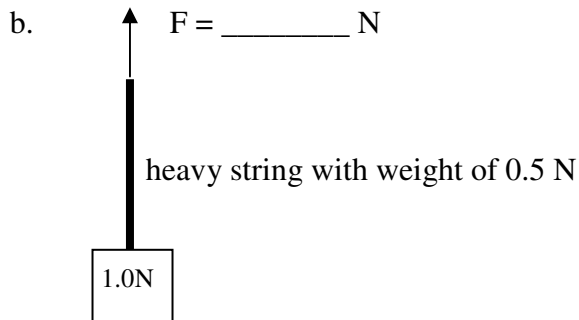
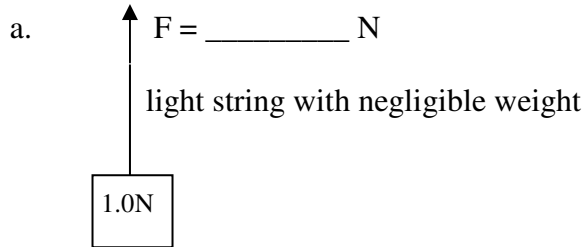
5. Using your data from the last investigation, determine the values for the coefficient of kinetic friction between the block and the ramp for each of the masses you used. Show your work (including your raw data) below or on a separate page. Include an estimate of the uncertainty. Report your results in an appropriate way (properly rounded, with units). Are your results reasonable? Do the results indicate that the coefficient of kinetic friction is the same for the three masses, as our simple model says it should be, since it should depend only on the materials involved?

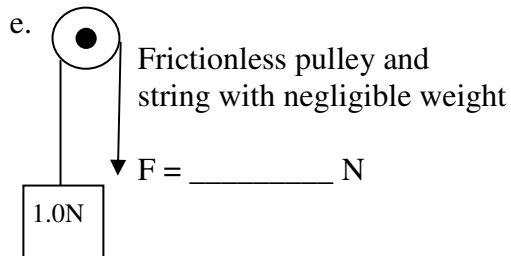
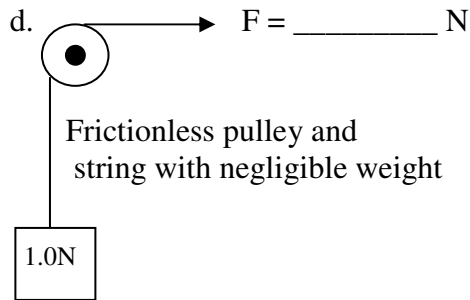
|

Physics 200B Lab 6 homework

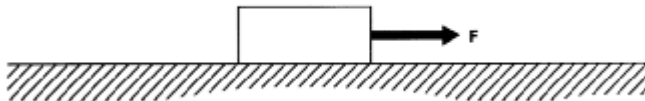
Name: _____

1. A 1.0-N weight is hanging at rest as shown. In each case, write in the magnitude of the unknown force. Explain the reasoning for each of your answers.





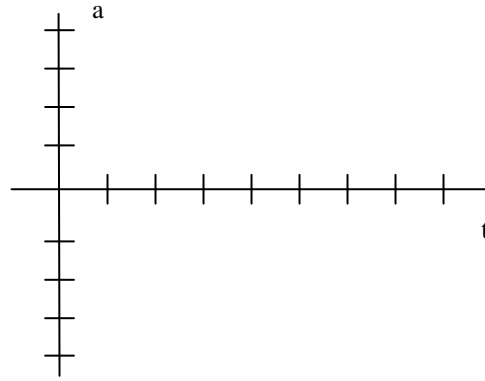
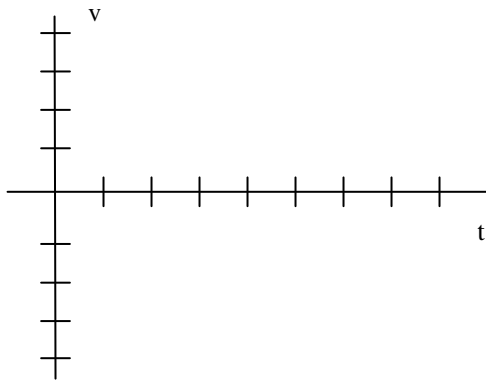
Questions 2-4 refer to the block on a flat surface shown below. A force F is applied to the block as shown. With an applied force of 2.5 N, the block moves with a constant velocity.



2. Explain how the block can move with a constant velocity even though it has a force applied to it. Is Newton's first law violated?

3. The block is now moving with a constant velocity that is twice as large as before. Approximately what applied force is needed to keep the block moving with this larger constant velocity? Explain.

4. Suppose that a constant force F of 5.0 N is applied to the block. Sketch below the shape of the velocity-time and acceleration-time graphs for the block.



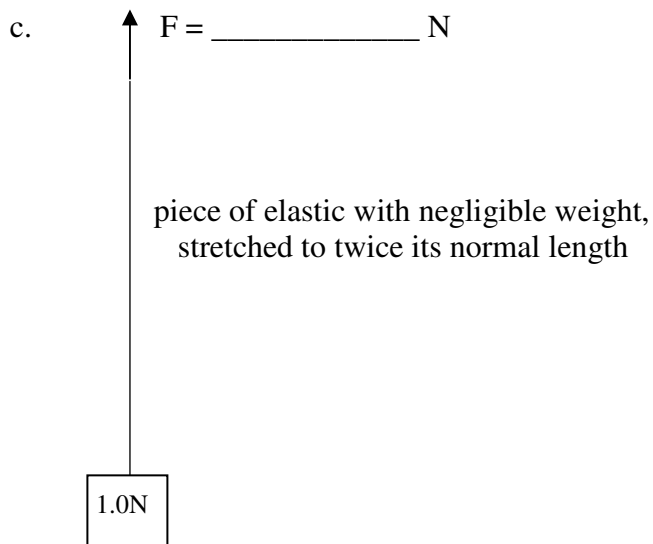
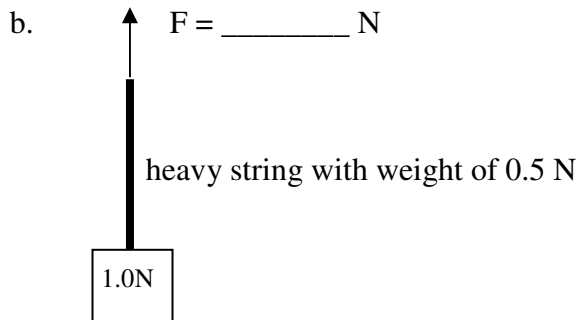
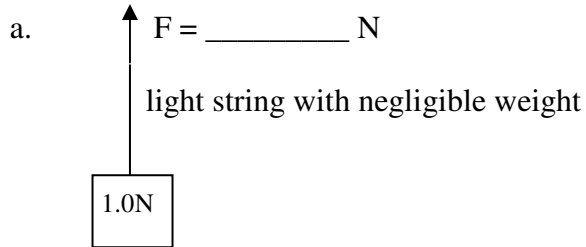
5. Using your data from the last investigation, determine the values for the coefficient of kinetic friction between the block and the ramp for each of the masses you used. Show your work (including your raw data) below or on a separate page. Include an estimate of the uncertainty. Report your results in an appropriate way (properly rounded, with units). Are your results reasonable? Do the results indicate that the coefficient of kinetic friction is the same for the three masses, as our simple model says it should be, since it should depend only on the materials involved?

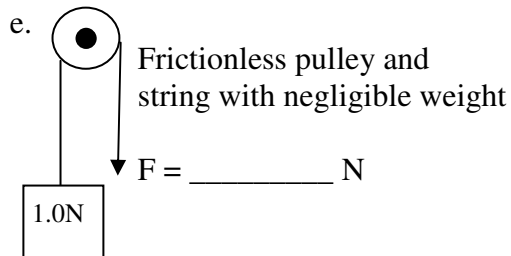
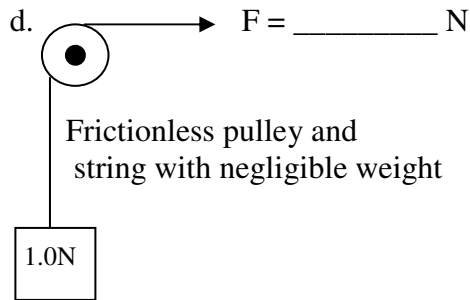
|

Physics 200B Lab 6 homework

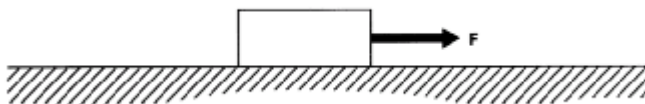
Name: _____

1. A 1.0-N weight is hanging at rest as shown. In each case, write in the magnitude of the unknown force. Explain the reasoning for each of your answers.





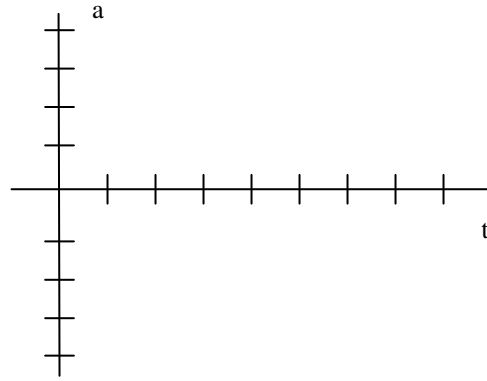
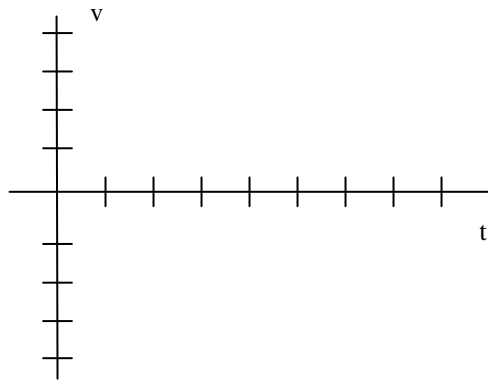
Questions 2-4 refer to the block on a flat surface shown below. A force F is applied to the block as shown. With an applied force of 2.5 N, the block moves with a constant velocity.



2. Explain how the block can move with a constant velocity even though it has a force applied to it. Is Newton's first law violated?

3. The block is now moving with a constant velocity that is twice as large as before. Approximately what applied force is needed to keep the block moving with this larger constant velocity? Explain.

4. Suppose that a constant force F of 5.0 N is applied to the block. Sketch below the shape of the velocity-time and acceleration-time graphs for the block.



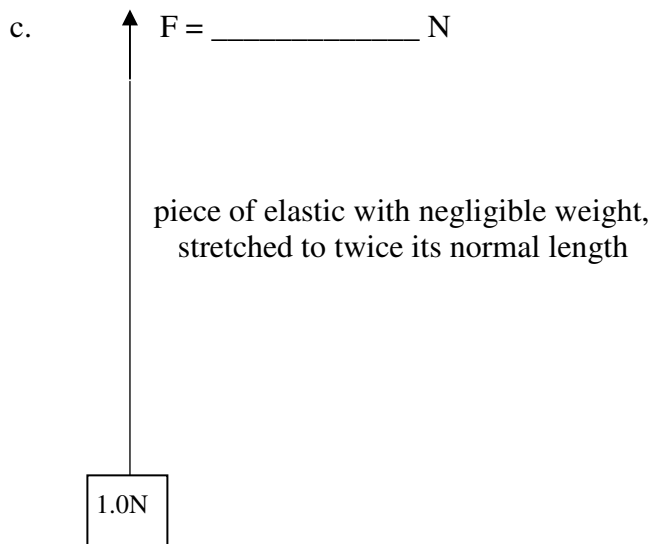
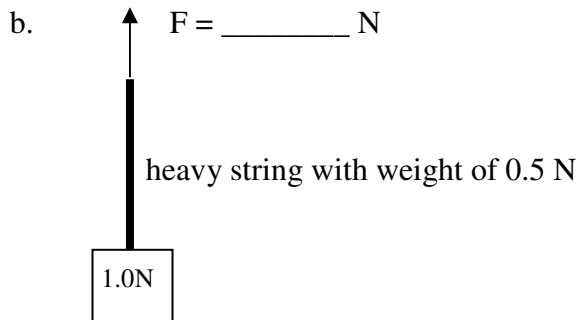
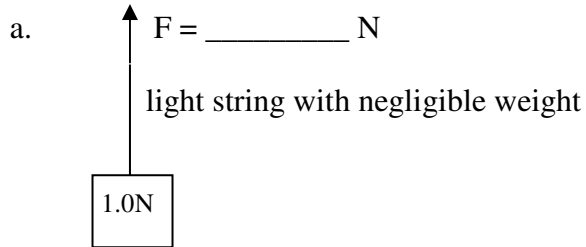
5. Using your data from the last investigation, determine the values for the coefficient of kinetic friction between the block and the ramp for each of the masses you used. Show your work (including your raw data) below or on a separate page. Include an estimate of the uncertainty. Report your results in an appropriate way (properly rounded, with units). Are your results reasonable? Do the results indicate that the coefficient of kinetic friction is the same for the three masses, as our simple model says it should be, since it should depend only on the materials involved?

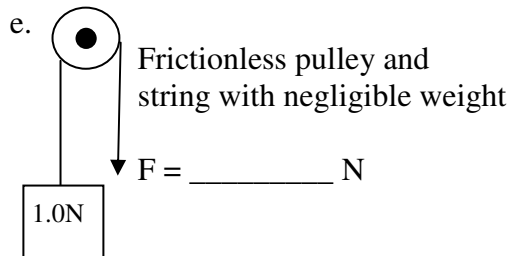
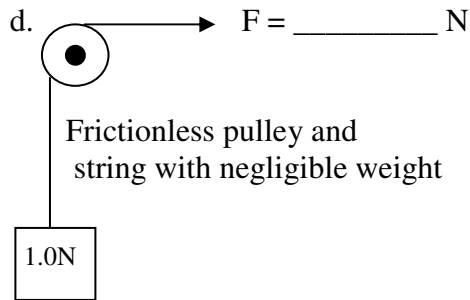
|

Physics 200B Lab 6 homework

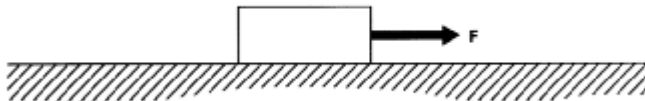
Name: _____

1. A 1.0-N weight is hanging at rest as shown. In each case, write in the magnitude of the unknown force. Explain the reasoning for each of your answers.





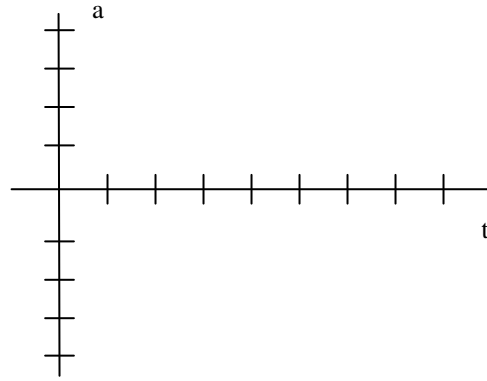
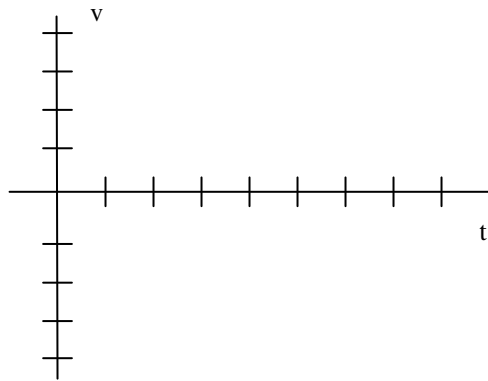
Questions 2-4 refer to the block on a flat surface shown below. A force F is applied to the block as shown. With an applied force of 2.5 N, the block moves with a constant velocity.



2. Explain how the block can move with a constant velocity even though it has a force applied to it. Is Newton's first law violated?

3. The block is now moving with a constant velocity that is twice as large as before. Approximately what applied force is needed to keep the block moving with this larger constant velocity? Explain.

4. Suppose that a constant force F of 5.0 N is applied to the block. Sketch below the shape of the velocity-time and acceleration-time graphs for the block.



5. Using your data from the last investigation, determine the values for the coefficient of kinetic friction between the block and the ramp for each of the masses you used. Show your work (including your raw data) below or on a separate page. Include an estimate of the uncertainty. Report your results in an appropriate way (properly rounded, with units). Are your results reasonable? Do the results indicate that the coefficient of kinetic friction is the same for the three masses, as our simple model says it should be, since it should depend only on the materials involved?

|