

**FRICTION**

**In each of the following situations state what effect the change will have on the force of friction using the following choices:**

a) increase

b) decrease

c) no change

- 1) The normal force increases. \_\_\_\_\_
- 2) The speed of the object changes from 10 m/s to 20 m/s. \_\_\_\_\_
- 3) The roughness of one surface is increased. \_\_\_\_\_
- 4) The surface area in contact increases. \_\_\_\_\_
- 5) A lubricant is added between the surfaces. \_\_\_\_\_
- 6)  $\mu_s$  changes to  $\mu_k$  \_\_\_\_\_
- 7) The angle of an incline increases. \_\_\_\_\_

**In each of the following situations state what effect the change will have on the coefficient of friction using the following choices:**

a) increase

b) decrease

c) no change

- 8) The normal force increases. \_\_\_\_\_
- 9) The speed of the object changes from 10 m/s to 20 m/s. \_\_\_\_\_
- 10) The roughness of one surface is increased. \_\_\_\_\_
- 11) The surface area in contact increases. \_\_\_\_\_
- 12) A lubricant is added between the surfaces. \_\_\_\_\_
- 13) The angle of an incline increases. \_\_\_\_\_