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**Ch 4.4 Everyday Forces -** Page 139- Practice Problems D – Coefficients of Friction

1. Once the crate in Sample D is in motion, a horizontal force of 53 N keeps the crate moving with a constant velocity. Find the *µk*, the coefficient of kinetic friction, between the crate and the floor.
2. A 25 kg chair initially at rest on a horizontal floor requires a 165 N horizontal force to set it in motion. Once the chair is in motion, a 127 horizontal force keeps it moving at a constant velocity.
3. Find the coefficient of static friction between the chair and floor.
4. Find the coefficient of kinetic friction between the chair and floor.
5. A museum curator moves artifacts into place on various different display surfaces. Using the values in Table 2 to find the *Fsnax*  and *Fk* for the following situations:
6. Moving a 145 kg aluminum sculpture across a horizontal steel platform.
7. Pulling a 15 kg steel sword across a horizontal steel shield.
8. Pushing a 250 kg wood bed on a horizontal wood floor.
9. Sliding a 0.55 kg glass amulet on a horizontal glass display case.