All problems are from **Meriam and Kraige**, *Engineering Mechanics –*
Dynamics, 5th Edition. Note that in previous editions the problem numbers
are different.

- **2D rigid body motion**
  6/18, 6/22, 6/60, 6/66, 6/67, 6/68, 6/94, 6/104, 6/106, 6/141, 6/143,
  6/201, 6/205, 6/213, 6/223 and 6/225

- **3D rigid body motion**
  7/5, 7/20, 7/27, 7/49, 7/55, 7/70, 7/71, 7/83, 7/85, 7/88, 7/90, 7/93,
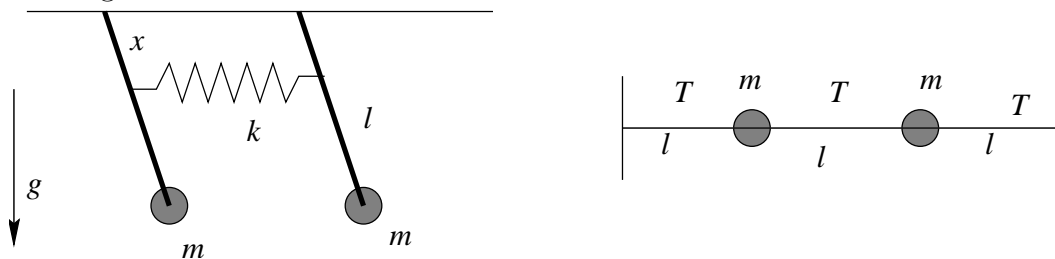 7/100, 7/102, 7/108, 7/110, 7/117, 7/122, 7/123, 7/140 and 7/141

- **Central force motion and variable mass systems**
  3/283, 3/284, 3/285, 3/288, 3/289, 3/294, 3/297, 3/301, 3/304, 4/71,
  4/74, 4/78 and 4/98

- **Vibrations**
  8/13, 8/19, 8/20, 8/31, 8/37, 8/65, 8/89, 8/108, 8/115, 8/118, 8/126
  and 8/133

In addition you should be able to find the natural frequencies of the following
two-degree of freedom oscillators:

In the first figure the pendulums consist of solid massless rods and the spring
is unstretched when the rods are vertical. The spring is mounted distance x
from the top of each rod. In the second figure the two masses are mounted
on a massless string with total length $3l$. The tension in the string is T.