Recitation Instructor (circle one): Moe Larry Curly Groucho Chico Harpo

## QUIZ \#4

1) A truck is traveling at $50 \mathrm{~m} / \mathrm{s}$ when the driver suddenly brakes bringing the truck to a halt in $150 \mathrm{~m} . \mathrm{A} 40 \mathrm{~kg}$ cubical box, 1.0 m on a side, lies on the truck bed. What is the minimum coefficient of static friction between the box and the bed that will prevent the box from sliding?
2) Three pulleys are each held in place by pins (the solid black circles) connected to the back wall. This question concerns the big pulley. It's weight is 100 N . What is the magnitude of the force exerted on it by its pin? Neglect friction and the mass of the ropes.

