

Chapter 4 rev 5

1. In class set up the ramp so that the wood block (felt side down) slides down at a constant velocity. Measure the mass of the block and the length and height of the ramp. Then draw a vector diagram of the event and solve for F_p and F_N' . Show all data!
2. A 55.0 kg (note that this is the mass) sign is suspended by two cables. The right one makes a 42.0° degree angle with the horizontal and the left one makes a 33.0° degree angle with the horizontal. Find the tension on each cable.
3. Two forces act on an object. One force is 33.4 N at 110.0° and the other one is 55.9 N at 25.0° . What is the resultant and equilibrant of them. Solve mathematically.