

Draw a labelled mathematical diagram (not a sketch!) to model each the following situations

(i) An elephant of mass 4000 kg standing still

(ii) A parachutist of mass M dangling from two ropes attached to her parachute

(iii) An ice skater of mass 65 kg on an ice rink skating at a constant velocity

Note – Use capital letters for forces, e.g. W for weight, R for normal reaction, T for tension, F for friction.

An unknown force of indeterminate cause is often called P or X .