**INCLINED PLANE**

You will be given a mass and an angle of inclination. You will be asked for the block’s acceleration and the normal force.

To solve inclined plane problems:

1. Draw and label Fg
2. Draw the components of Fg parallel (x-axis) and perpendicular (y-axis) to the plane
3. Use sin and cos to label these components
4. Use Fnet-x = max to solve for acceleration
5. Use Fnet-y = may to solve normal force

Example 1: Find the acceleration and normal force acting on a 10 kg block sliding down a frictionless plane inclined at 30o with the horizontal.

Example 2: Find the acceleration and normal force of a 10 kg object on a frictionless plane at 60o with the horizontal.