PHYSICS 11 NORMAL FORCE – SUMMARY

- **Normal Force** is always perpendicular to the surface of contact.
- **Normal Force does not exist without the surface of contact.**
- Normal force is directed away from the surface of contact.
- Magnitude of the normal force is related to other forces (or vector components of other forces) that are perpendicular to the surface of contact.

A: Calculate the magnitude of the normal force:

1. A 75.0 kg object lies on a horizontal surface. No other forces are involved.

2. A 75.0 kg object lies on an inclined plane of 28°. Assume no frictional force.

3. A 25.0 kg object is sliding along a frictionless horizontal surface.

4. A 30.0 kg object is pulled with $\vec{F}_{pull}$ = 25 N [R] along a frictionless surface.