Name	
Honors Physics	
Period	

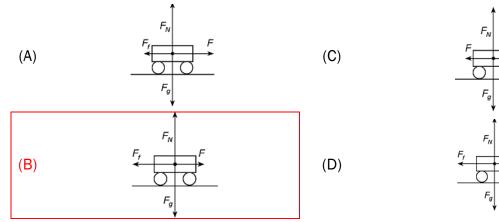
Forces WS #5H Mrs. Nadworny

Date ___

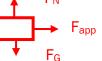
Free Body Diagrams

Directions – Read online textbook pages 125 – 128. For each scenario below create a free body diagram. Be sure to draw the arrows appropriate lengths and label them with the type of force.

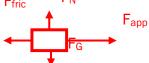
1. Which vector diagram best represents a cart slowing down as it travels to the right on a horizontal surface?



2. A box is being pushed to the right across a frictionless surface.



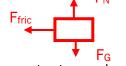
3. A box is being pushed to the right across a tabletop and is accelerating. [Hint: Yes, there is friction.] F_{fric} F_N



Fapp

Fg

4. A box is sliding to the right across a tabletop (after being pushed) and is slowing down.



- 5. A water bottle is being lifted at constant speed.
- 6. A ball is moving upward through the air after being thrown.
- 7. A ball is moving upward through the air after being thrown. [Neglect air resistance.]