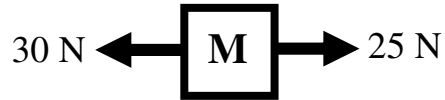


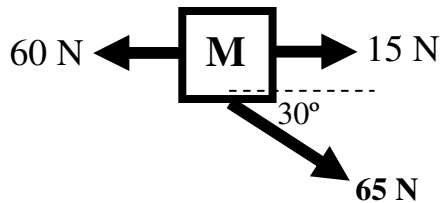
## PreAP Physics: Due 10/12

1. Give Newton's 3 Laws of Motion:

2. Find the net force on the object at the right.



3. Three forces are acting on the following object. Find the net force on the object.



4. Given the above net force (Q3), if  $M = 6 \text{ kg}$ , find its acceleration.

5. A  $3 \text{ m/s}^2$  acceleration occurs from a  $15 \text{ N}$  force. How much mass was it pulling on?

6. How much weight does a  $23 \text{ kg}$  object?

7. How much mass does a  $550 \text{ N}$  object have?

8. If an force pulls on an object to the right, which direction does friction pull?

9. What force pushes up from a surface to support an object?

10. What is the normal force pushing up on the  $8 \text{ kg}$  mass?

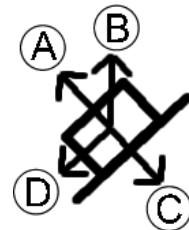
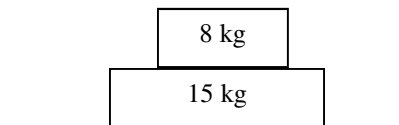
11. What is the normal force pushing up on the  $15 \text{ kg}$  mass?

12. Which kind of friction acts on moving objects?

13. Which kind of friction tries to keep an object from moving?

14. Which letter is the normal force on the object on the tilted surface?

15. If a  $25 \text{ N}$  object has  $18 \text{ N}$  of static friction, what is its coefficient of static friction?



16. An  $12 \text{ N}$  object has a coefficient of kinetic friction of  $0.78$ . Find how much kinetic friction does it have?