

Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

### Identifying Forces

**Background:** Forces have a magnitude AND direction. Forces are usually identified by arrows; arrows point in the direction of the force and the length of the arrow indicates how strong it is. In the cases below, each force will be labeled with its magnitude to prevent confusion. Unbalanced forces cause a change in the object's motion, causing it to move in the direction of the stronger force. Balanced forces, on the other hand, cancel each other out and DO NOT change an object's motion.

#### Review:

A force can be identified by \_\_\_\_\_ AND \_\_\_\_\_

How do balanced forces affect an object's motion?

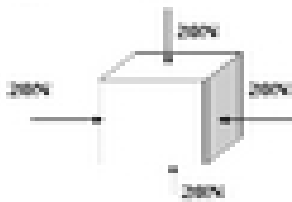
\_\_\_\_\_

How do unbalanced forces affect an object's motion?

\_\_\_\_\_

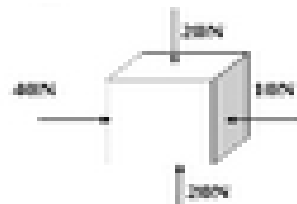
**Directions:** for each, identify if the forces are balanced or unbalanced and which direction it will move.

1.



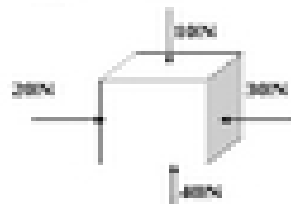
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2.



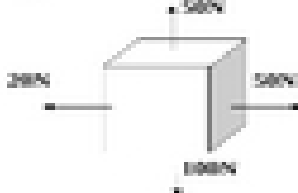
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3.



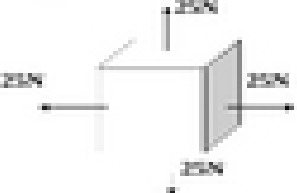
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4.



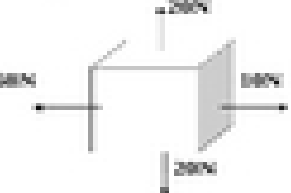
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5.



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\_\_\_\_\_

6.



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