

Net Force Worksheet

What causes objects to move? For each problem, complete the questions using your notes and what you have learned so far in this Forces Unit.

1. Write the definition of each term in the definition column. Then decide whether that force produces motion and write either yes, no or it depends in the motion column.

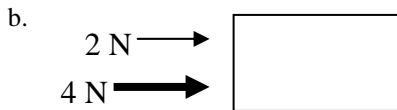
Vocabulary term	Definition	Change in motion? (yes, no or it depends)
Net force		
Balanced forces		
Unbalanced forces		

2. For each of diagram, determine the net force acting on the object. Follow the format for showing your work shown in (a). Then, write whether or not there will be a change in motion. If yes, write the direction the object will move in.



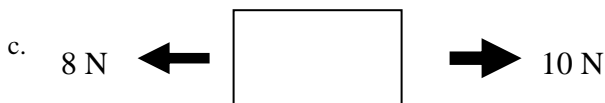
Net force: $4\text{ N} - 2\text{ N} = 2\text{ N}$ to the left.

Change in motion: The box will move to the left.



Net force:

Change in motion:



Net force:

Change in motion:

d.



Net force:

Change in motion:

e.



Net force:

Change in motion:

f.



Net force:

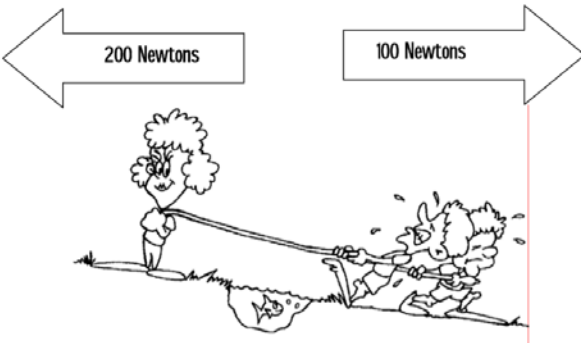
Change in motion:

g.



Net force:

Change in motion:



Below is a diagram of a tug-a-war. Write a short paragraph to describe what will happen, using the terms *net force*, *balanced OR unbalanced forces*, AND *change in motion*.
