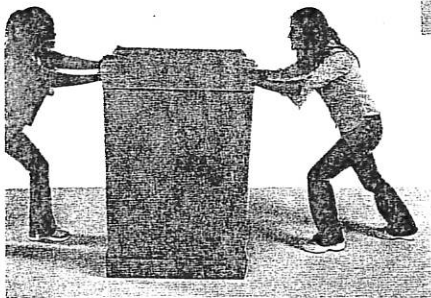


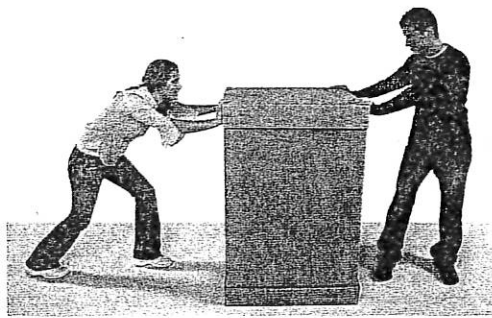
Figure 16 Forces can be balanced and unbalanced.



$$\rightarrow + \leftarrow = 0$$

Net Force = 0

A These students are pushing on the box with an equal force but in opposite directions. Because the forces are balanced, the box does not move.



$$\rightarrow + \leftarrow = \rightarrow$$

Net Force = \rightarrow

B These students are pushing on the box with unequal forces in opposite directions. The box will be moved in the direction of the larger force.



$$\rightarrow + \rightarrow = \rightarrow$$

Net Force = \rightarrow

C These students are pushing on the box in the same direction. The combined forces will cause the box to move.

On a piece of blank paper:

Make **3** drawings like A, B, & C above, but think of your own example. Be creative!

Ideas include:

- Football linemen
- Pool balls colliding
- Bowling
- Car crash
- Tug-of-War!