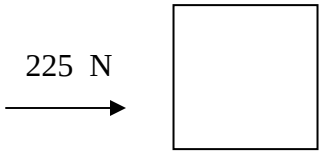
Net Forces Challenge #1

Interpret each drawing of forces on the box. Calculate and write the resulting net force on the blank below the box (make sure to include the correct unit of measure). On the next blank, write the word balanced or unbalanced and circle the arrow for the direction of the resulting net force.

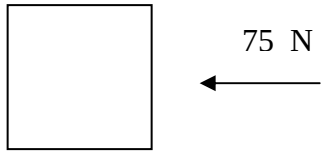
A.



Net Force _____

_____ → ←

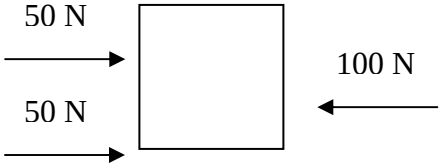
B.



Net Force _____

_____ → ←

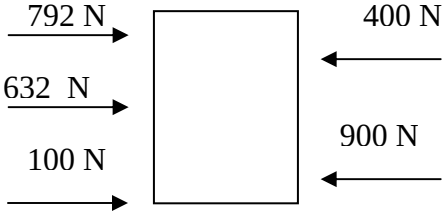
C.



Net Force _____

_____ → ←

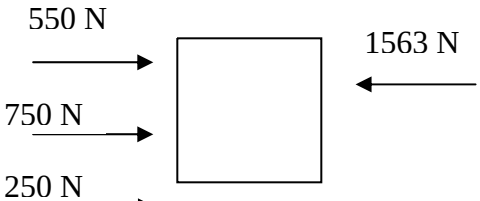
D.



Net Force _____

_____ → ←

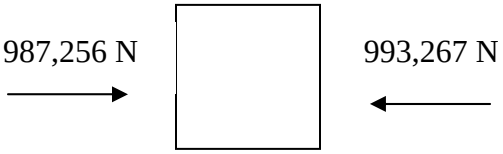
E.



Net Force _____

_____ → ←

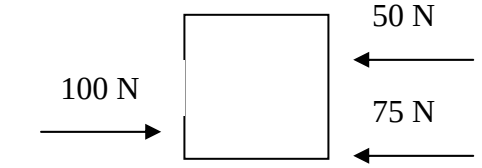
F.



Net Force _____

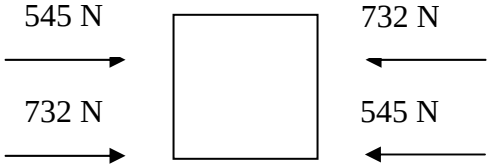
_____ → ←

1.



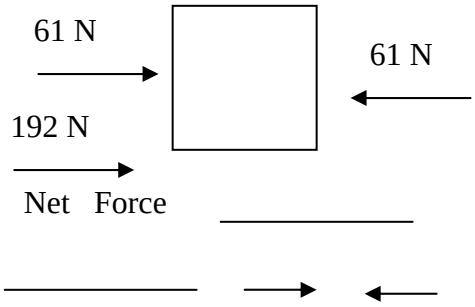
Net Force _____

2.



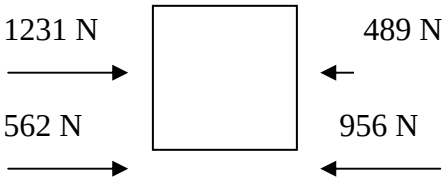
Net Force _____

3.



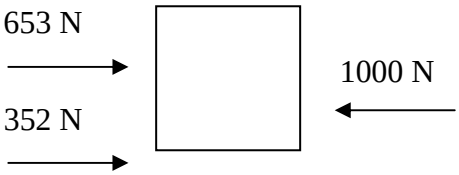
Net Force _____

4.



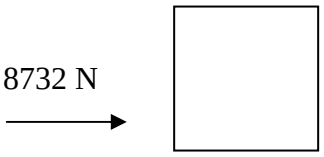
Net Force _____

5.



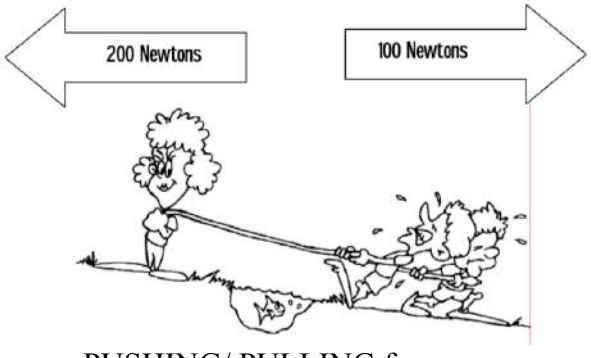
Net Force _____

6.



Net Force _____

Below is a diagram of a tug-a0war. Circle the correct word to complete the sentences that follow.



a. The forces shown are PUSHING/ PULLING forces.

b. The forces shown are acting in the SAME DIRECTION/ OPPOSITE DIRECTIONS.

c. The forces are EQUAL/ NOT EQUAL.

d. The forces are BALANCED/ UNBALANCED..

e. Motion is to the RIGHT/ LEFT.

Calculating Net Forces - Answer Key

Examples

A. 225 Newtons (N) - unbalanced - to the right
B. 75 N – unbalanced – to the left
C. 0 N – balanced – no direction
D. 224 N – unbalanced – to the right
E. 13 N – unbalanced – to the left
F. 6011 N – unbalanced – to the left

Problems

1. 25 N – unbalanced – to the left
2. 0 N – balanced – no direction
3. 192 N – unbalanced – to the right
4. 348 N – unbalanced – to the right
5. 5 N – unbalanced – to the right
6. 8732 N – unbalanced – to the right
7. 2380 N – unbalanced – to the left
8. 13 N – unbalanced – to the left