

Guided Reading Chapter 5 Section 3

1. The sum of all the forces acting upon an object is called the _____ force.
2. Balanced forces result in a net force of _____.
a) ten b) zero c) one d) five
3. Sketch a picture that shows the 4 forces acting on a plane.

4. When calculating the net force on an object, you must _____ the forces individually and make sure to apply _____ or negative direction to each.
5. When the net force on an object is zero, we say it is in _____.
6. Sketch Figure 5.16 showing objects at rest and those that are in motion. Don't forget labels!

7. Unbalanced forces cause _____.
a) problems b) equilibrium c) acceleration d) weight
8. Explain the "normal" force in your own words.

9. Draw the free-body diagram in figure 5.19. Include all arrows and force amounts.

10. Compare the separate forces in the free-body diagram, you drew above. How do you know mathematically that the table is experiencing equilibrium?

11. A free-body diagram is meant to help people understand _____ force acting on the object represented in the diagram.

12. It is important to represent _____ and positive forces in a free-body diagram.