

For each of the situations below, sketch a copy of the diagram, and provide an appropriate separate force diagram for the shaded object. Be sure to label your force vectors and make their length approximately equal to their magnitude. The force diagrams should be separate from the sketch.

1. The object is stationary.	2. The object is stationary and is being pushed against a wall.	3. The object is stationary and is being pulled.
4. The object is accelerating.	5. The object is accelerating along an inclined plane.	6. The object is suspended from the ceiling.
7. The object is suspended from the ceiling.	8. The object is accelerating.	9. The object is accelerating.
10. The object is accelerating.	11. The object is accelerating a force parallel to the surface.	12. The object is pulled by a force at an angle to the surface.
13. The object is pulled upward at an angle to the right.	14. The object is accelerating a force applied downward at an angle.	15. The object is falling from rest.
16. The object is falling at constant downward velocity.	17. The ball is moving in a parabolic trajectory.	18. The ball is on the top of a parabolic trajectory.

19. Draw your own situation and a corresponding force diagram.

20. Do it again with a new situation.

21. And one more time with a third situation.