

Quiz**Name:**

1. Three forces in equilibrium act on a point P . Force F_1 acts vertically downward with a magnitude of 20 pounds. Force F_2 acts upward and to the left at an angle of 30 degrees with the horizontal and force F_3 acts upward and to the right .at an angle of 60 with the horizontal. Determine the magnitudes of F_2 and F_3 .

2. An artificial satellite has been sent to study an asteroid. It circles the asteroid in an elliptical orbit that has a semimajor axis of 20 kilometers and a period of 45 minutes. Use this information to determine the mass of the asteroid in kilograms.