Physics club.

Homework 2.

Please try to solve the following problem.

A girl of mass 40 kg is staying in the elevator. Find the force which the elevator floor applies to the girl's feet. There are 3 cases:

a) The elevator is staying.
b) The elevator is accelerating up and the acceleration is numerically equal to the acceleration due to gravity g=9.8 m/s^2.
c) The elevator is accelerating down and the acceleration is numerically equal to the acceleration due to gravity g=9.8 m/s^2.

Make a picture with force diagram.