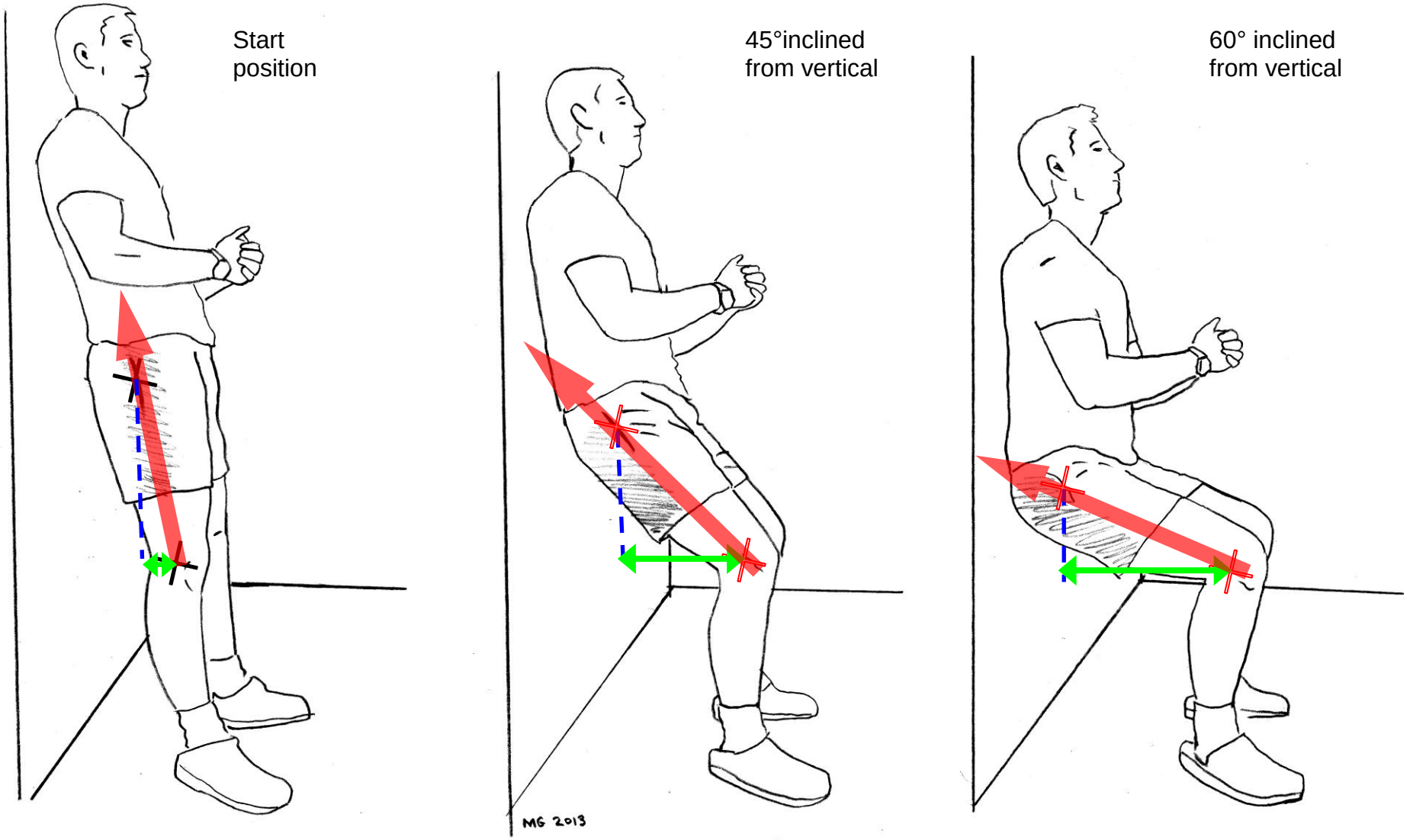
Basic Biomechanics of the Wall Squat



The green arrow shows the length of the lever and therefore the relative force required to return to the start position.
The red arrow shows the direction of muscle force at each angle of squat.
The deeper the squat becomes the more muscle force is required to return to the start position due to the increased leverage. The deeper the squat becomes the more the direction of muscle force is into the wall making it increasingly difficult to overcome the friction of the wall and return to the start position. If the subject is unable to exert sufficient force the effect of gravity will cause them to drop into squat until they reach the limit of their range of motion. © Mark Geldman 2013, licensed to Zena Schofield for use in the current case and for demonstration purposes.