

## 4. Knee Flexibility

We will assume the same starting position as in 3a (page 48). The helper needs to stabilize the pelvis in neutral and prevent it from moving. For the knee being assessed, the hip should be flexed to  $90^\circ$  or to its limit of flexion. Evaluate one knee at a time. Assess knee flexibility if the person's knee(s) tend to be:

- Bent (flexed)
- Straightened (extended)

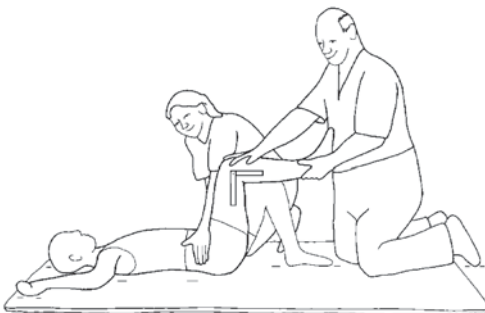
### a. Bent (flexed): Typical posture

**Movement to assess:** Straightening (extending) the knee. With one hand on the thigh above the knee and the other hand behind the lower leg above the ankle, begin to straighten the leg at the knee. When the helper feels the pelvis start to roll under (posterior tilt), stop straightening the knee. Measure that angle. If the knee straightens to  $90^\circ$ , it is considered flexible. (If the person wants to use elevating lower leg supports (elevating legrests), assess the person's full knee flexibility, past  $90^\circ$ .)

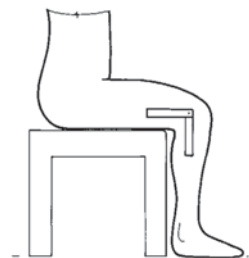


Why is it important to measure the knee flexion angle?

If the knees extend (straighten) to at least  $90^\circ$ , the person can sit with the leg-to-seat surface angle set at  $90^\circ$  or less.



Knee(s) straighten to  $90^\circ$



Leg-to-seat surface support angle set at  $90^\circ$



Why is it important to stabilize the pelvis? The muscles that bend the knees (the hamstrings) are also connected to the underside of the pelvis at the ischial tuberosities. If the hamstrings are tight, straightening the knees may cause the pelvis to roll backwards (posteriorly tilt).