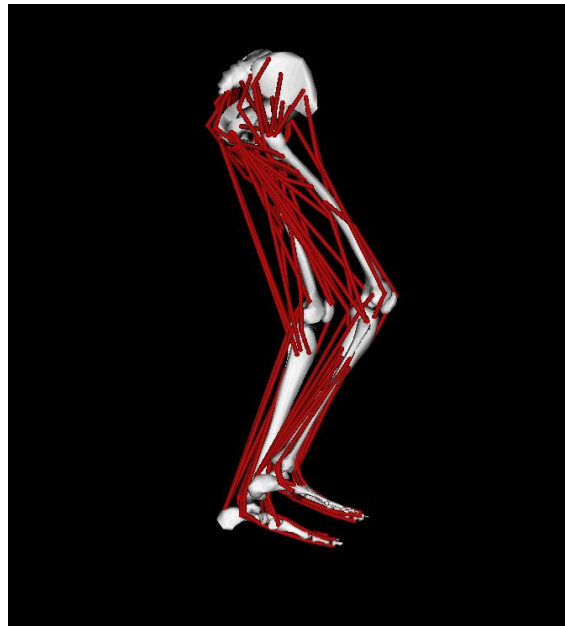
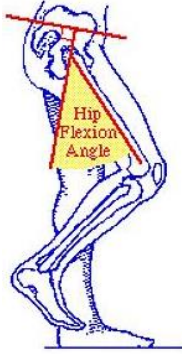
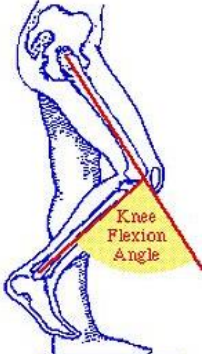
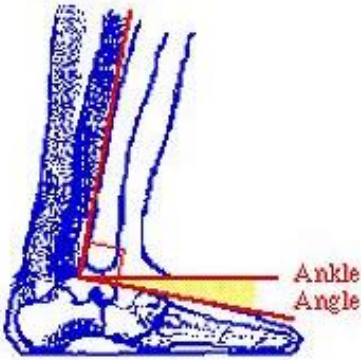


Part 1

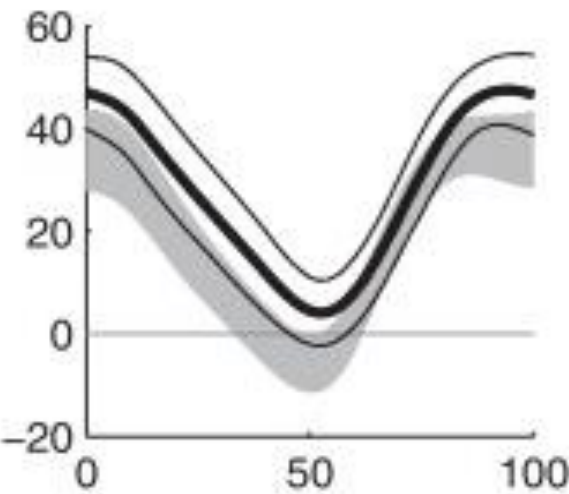
Watch the video of a patient walking. From the video, estimate the hip, knee and ankle angles in the sagittal plane throughout the gait cycle. Record your results on the graphs overleaf, which contain able-bodied joint angles (in grey) for your reference.



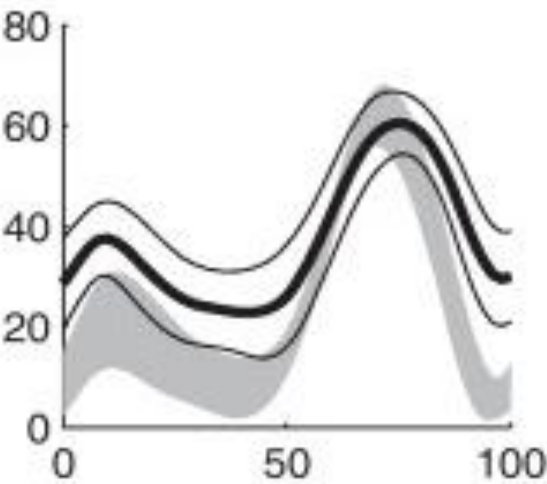
Use the joint angle convention summarised in the table below.

| Hip | Knee | Ankle |
|---|---|---|
|  |  |  |

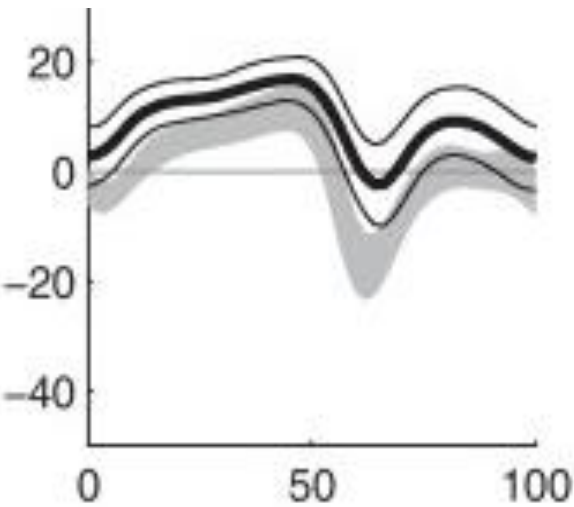
Hip Flex/Extension



Knee Flex/Extension

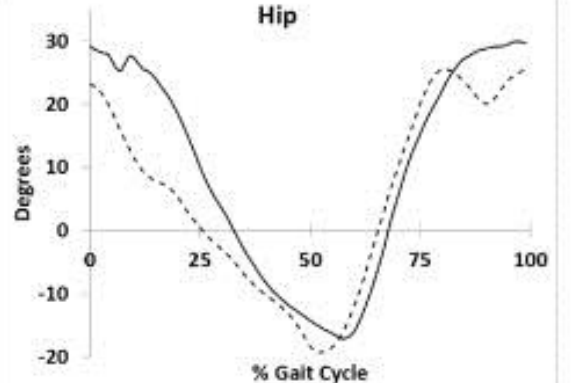
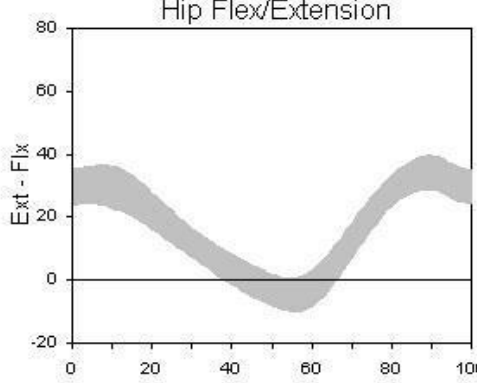
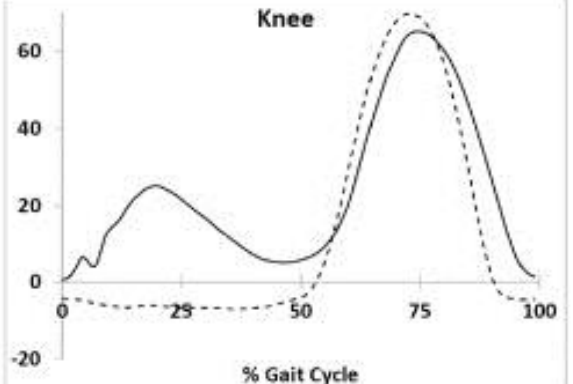
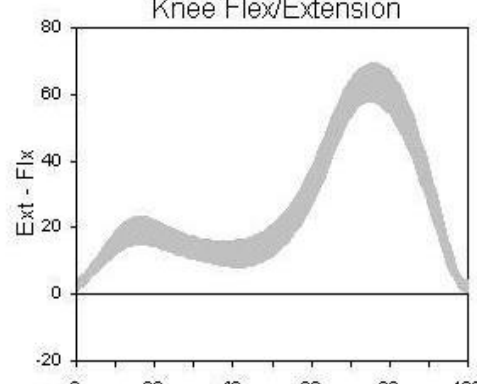


Dors/Plantar Flexion



Part 2

Working in groups of around five people, convert the kinematic graphs in the left column of the table to a walking gait. Choose one person to act as the subject. Can you determine the gait pathology? Able-bodied kinematic parameters (right column) have been included for your reference.

| Gait Pathology (Solid line, left side; dotted line, right side) | Able-bodied |
|---|--|
|  <p>Hip</p> <p>Y-axis: Degrees (-20 to 30)</p> <p>X-axis: % Gait Cycle (0 to 100)</p> |  <p>Hip Flex/Extension</p> <p>Y-axis: Ext - Flex (-20 to 80)</p> <p>X-axis: % Gait Cycle (0 to 100)</p> |
|  <p>Knee</p> <p>Y-axis: Degrees (-20 to 60)</p> <p>X-axis: % Gait Cycle (0 to 100)</p> |  <p>Knee Flex/Extension</p> <p>Y-axis: Ext - Flex (-20 to 80)</p> <p>X-axis: % Gait Cycle (0 to 100)</p> |

