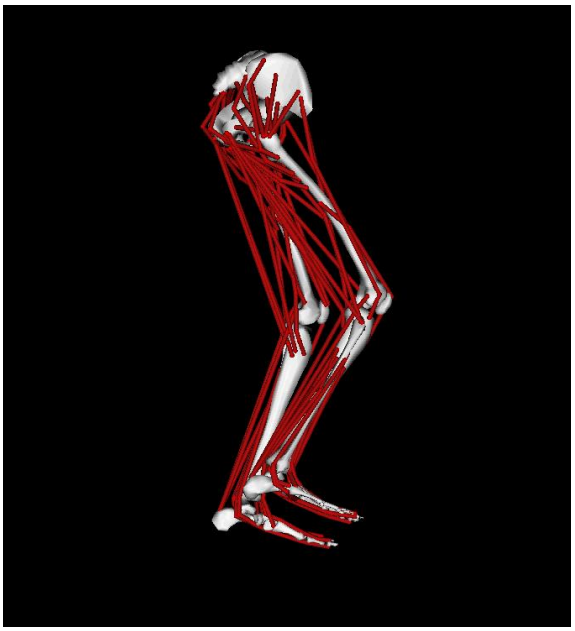
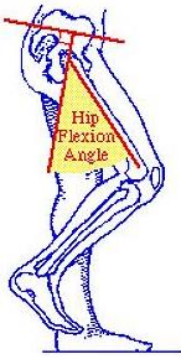
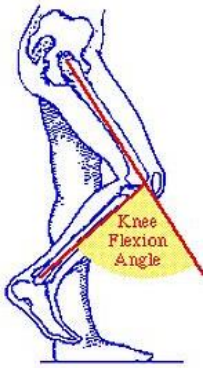
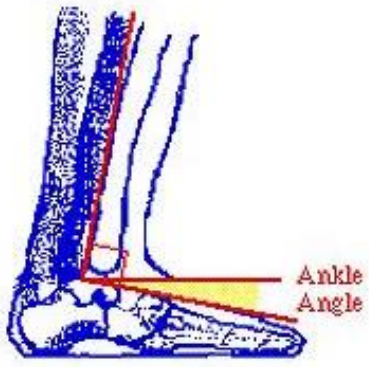
BIOM9420 Clinical Laboratory Science
Week 7 Problem Solving IV

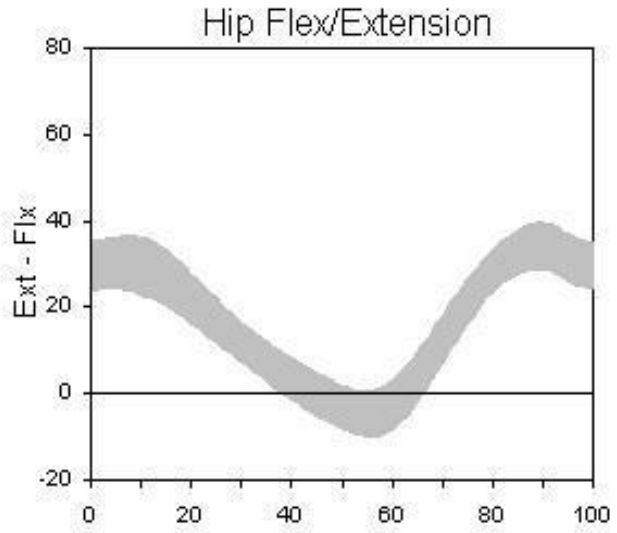
Part 1

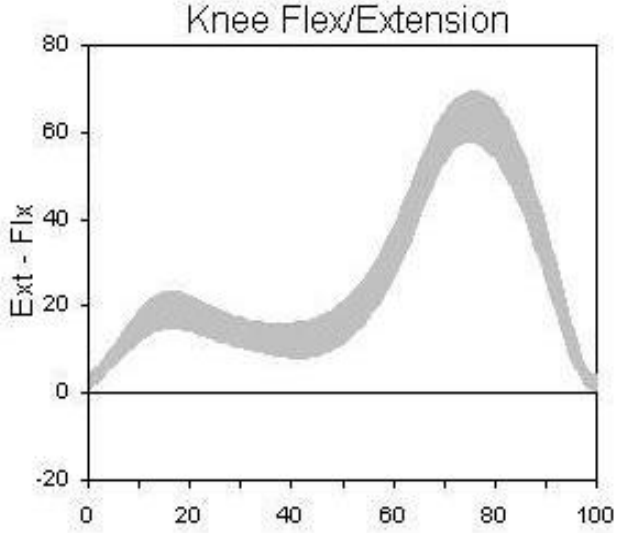
Watch the video of a patient walking. From the video, estimate the hip, knee and ankle angles in the sagittal plane throughout the gait cycle. Record your results on the graphs overleaf, which contain able-bodied joint angles (in grey) for your reference.

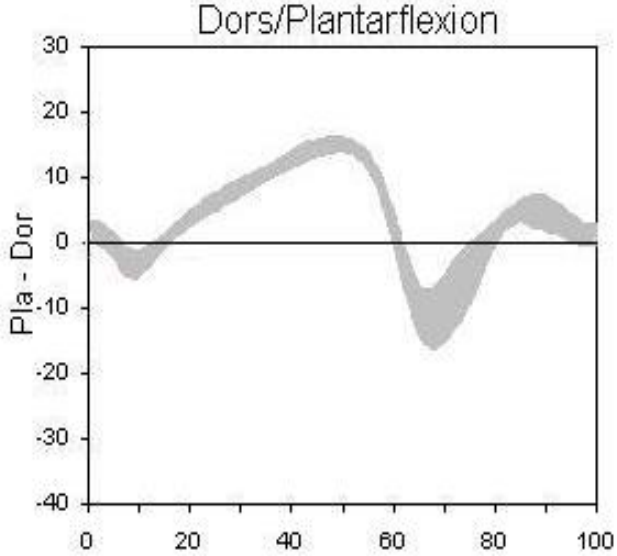


Use the joint angle convention summarised in the table below.

Hip	Knee	Ankle
		


Hip Flex/Extension
Ext - Flx
80
60
40
20
0
-20
0
20
40
60
80
100


Knee Flex/Extension
Ext - Flx
80
60
40
20
0
-20
0
20
40
60
80
100


Dors/Plantarflexion
Pla - Dor
30
20
10
0
-10
-20
-30
-40
0
20
40
60
80
100

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**