Mass of body segment

To study bases of mechanics, we recommend you to choose one of the following web sites.
If you need to explain some mechanical variable, you can use this dictionary.

The **masses of body segments** can be count if you know the total height ant weight of a person. One of frequently used methods was described by Zatsiorskji and Selujanov (1979), who determined the parameters B_0, B_1 a B_2 for each body segment.

The equation for body mass is following

$$m_i = B_0 + B_1 m + B_2 v$$

where ***m*** (kg) is total mass of a person and ***v*** (in cm!) is height of a person..

The parameters B_0 , B_1 a B_2 see table.

More precise morphological data for pelvic floor, shoulder and arm see here

http://biomech.ftvs.cuni.cz/pbpk/kompendium/biomechanika/geometrie_hmotnost_en.php

Table of weight segments coefficients.

Segment name	B_0[kg]	B_1	B_2[kg/cm]
Head+neck	1.296	0.0171	0.0143
Hand	-0.1165	0.0036	0.00175
Forearm	0.3185	0.01445	-0.00114
Upperarm	0.25	0.03012	-0.0027
Leg	-0.829	0.0077	0.0073
Shank	-1.592	0.03616	0.0121
Thigh	-2.649	0.1463	0.0137
Trunk			
Upper part of the trunk	8.2144	0.1862	-0.0584
Middle part of the trunk	7.181	0.2234	-0.0663
Lower part of the trunk	-7.498	0.0976	0.04896

http://biomech.ftvs.cuni.cz/pbpk/kompendium/biomechanika/weightcoeff_en.php