griffithzt / CSCI215Lab03

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griffithzt Changed line 35 for a more accurate number.   ee31aea on Sep 24

1 contributor

94 lines (71 sloc)   2.42 KB

```javascript
1    function calculate() {
2
3        var female = document.getElementsByName("sex")[1].checked;
4        var male = document.getElementsByName("sex")[0].checked;
5
6        var weight = document.getElementsByName("weight")[0].value;
7        var height = document.getElementsByName("height")[0].value;
8
9        console.log( 'Male = ' + male );
10       console.log( 'Weight = ' + weight );
11       console.log( 'Height = ' + height );
12
13       // ------------------------------
14       // Conversions
15       // ------------------------------
16       // lbs to kg: 1 lb = 0.454 kg
17       // inch to meter: 1 in = 0.0254 m
18       // inch to cm: 1 in = 2.54 cm
19
20       // =========================================
21       // Todo: Perform conversion calculations here
22       kg = weight * .454;
23       meter =  height * 0.0254;
24         cm = height * 2.54;
25         //weight = kg;
26         //height = cm;
```

```javascript
27        // -------------------------------
28        // Body Surface Area (BSA)
29        // -------------------------------
30
31        var BSA = 0;
32
33        // =========================================
34        // Todo: Perform BSA calculation here
35        numBSA = (height * weight);
36        denBSA = 3600;
37        calcBSA = Math.sqrt((numBSA / denBSA));
38        BSA = calcBSA;
39        // -------------------------------
40        // Ideal Body Weight (IBW)
41        // -------------------------------
42
43        var IBW = 0;
44
45        if ( female ) {
46
47            // =========================================
48            // Todo: Perform female IBW calculation here
49            x = 45.5;
50            y = 2.3;
51            z = 60;
52            female = x + y * (height - z)
53                IBW = female;
54
55
56        } else if ( male ) {
57
58            // =========================================
59            // Todo: Perform male IBW calculation here
60            var a = 50;
61            var b = 2.3;
62            var c = 60;
63            male = a + b * (height - c)
64                IBW = male;
```

```javascript
65          }

67          // -------------------------------
68          // Body Mass Index (BMI)
69          // -------------------------------

71          var BMI = 0;

73          // =======================================
74          // Todo: Perform BMI calculation here
75              numBMI = kg;
76              denomBMI = Math.pow( meter, 2 ) ;
77              calcBMI = numBMI / denomBMI;
78              BMI = calcBMI;

80          // Do not modify this function call
81          display( BSA, IBW, BMI );

83      }

85      // -----------------------------------
86      // Do not modify this function
87      function display( BSA, IBW, BMI ) {

89          var message = 'Body Surface Area = ' + BSA.toPrecision(4) + ' m^2\nIdeal Body Weight = ' + IBW.toPrecision(4) + ' kg\nBody Mass Index

91          document.getElementById("output").innerHTML=message;

93      }
```