

Step Test

Test Description:

- The step test is completed by stepping up and down on a 13-in step for females and an 17-inch step for males.
- You will maintain a constant cadence for 3 minutes.
- At the end of the test, you sit down on the step and find your pulse at the carotid artery. A partner will take your pulse at the radial artery.
- You will begin counting 5 seconds after you sit and will count the pulse for 15 seconds. You MUST remain seated to do a second pulse count 30 seconds later for another 15 seconds.
- You will record both pulse counts made by you and your partner.

Step Test Recovery Scale	
$\sqrt{(2x^2 - \Delta^3)}$ Score	Percentage
23 & below	100
24-24.9	99
25-25.9	98
26-26.9	97
27-27.9	96
28-28.9	95
29-29.9	94
30-30.9	93
31-31.9	92
32-32.9	91
33-33.9	90
34-34.9	89
35-35.9	88
36-36.9	87
37-37.9	86
38-38.9	85
39-39.9	84
40-40.9	83
41-41.9	82
42-42.9	81
43-43.9	80
44-44.9	79
45-45.9	78
46-46.9	77
47-47.9	76
48-48.9	75
49-49.9	74

Step Test Calculation Chart

$$\sqrt{(2x^2 - \Delta^3)}$$

Δ = Difference of +1 min recovery entrance and exit x = exit 1 min. recovery count

If the student's +1 min recovery exit count is LOWER, subtract Δ^3 from $2x^2$, take the $\sqrt{\quad}$

If the student's +1 min recovery exit count is HIGHER, add Δ^3 to $2x^2$, then take the $\sqrt{\quad}$

<u>x</u>	<u>2x²</u>	<u>x</u>	<u>2x²</u>	<u>-Δ</u>	<u>Δ^3</u>
10	200	27.5	1512.5	1.5	3.4
10.5	220.5	28	1568	2	8
11	242	28.5	1624.5	2.5	15.6
11.5	264.5	29	1682	3	27
12	288	29.5	1740.5	3.5	42.9
12.5	312.5	30	1800	4	64
13	338	30.5	1860.5	4.5	91.1
13.5	364.5	31	1922	5	125
14	392	31.5	1984.5	5.5	166.4
14.5	42.5	32	2048	6	216
15	450	32.5	2112.5	6.5	274.6
15.5	480.5	33	2178	7	343
16	512	33.5	2244.5	7.5	421.9
16.5	544.5	34	2312	8	512
17	578	34.5	2380.5	8.5	614.1
17.5	612.5	35	2450	9	729
18	648	35.5	2520.5	9.8	857.4
18.5	684.5	36	2592	10	1000
19	722	36.5	2664.5		
19.5	760.5	37	2738		
20	800	37.5	2812.5		
20.5	840.5	38	2888		
21	882	38.5	2964.5		
21.5	924.5	39	3042		
22	968	39.5	3120.5		
22.5	1012.5	40	3200		
23	1058	40.5	3280.5		
23.5	1104.5	41	3362		
24	1152	41.5	3444.5		
24.5	1200.5	42	3528		
25	1250	42.5	3612.5		
25.5	1300.5	43	3698		
26	1352	43.5	3784.5		
26.5	1404.5	44	3872		
27	1458	44.5	3960.5		
		45	4050		