

Trunk Lift

⇒ *Recommended*

It is important that attention be given to performance technique during this test. The movement should be performed in a slow and controlled manner. The maximum score on this test is 12 inches. While some flexibility is important, it is not advisable (or safe) to encourage hyperextension.

Test-retest studies of the trunk extension test (done without limiting the lift to 12 inches) have reported high reliability in high school and college aged students. There are no data on the consistency results for younger children.

Research results have shown that isokinetic trunk endurance, torso length, body weight, passive trunk extension, trunk extension endurance, trunk strength, and flexibility all contribute to performance of the trunk lift. However, a single repetition, partially body weight limited, restricted range item, this test is a minimal assessment of the components of trunk strength and flexibility. Most school-aged individuals will pass this test easily.

Test Objective

To lift the upper body off the floor using the muscles of the back and hold the position to allow for the measurement.

Equipment and Facilities

Gym mats and a measuring device are required to administer this test. A yardstick or 15-inch ruler is preferred; however a 12-inch ruler could be used if care is taken to make certain that the ruler is not placed directly under the student's chin. If students are measuring each other, the "rulers" should be made of some pliable material such as poster board. It is helpful to mark the 6-, 9-, and 12-inch marks with tape. Rope cut to 12 inches with the inch marks taped can also be used as a measuring device.

Test Instructions

The student being tested lies on the mat in a prone position (facedown). Toes are pointed and hands are placed under the thighs. Place a coin or other marker on the floor in line with the student's eyes. During the movement, the student's focus should not move from the coin or marker. The student lifts the upper body off the floor, in a very slow and controlled manner, to a maximum height of 12 inches (photos 7.4, 7.5, and 7.6). The head should be maintained in a neutral (straight) alignment with the spine. The position is held long enough to allow the tester to place the ruler on the floor in front of the student and determine the distance from the floor to the student's chin. The ruler should be placed at least an inch to the front of the student's chin and not directly under the chin. Once the measurement has been made, the student returns to the starting position in a controlled manner. Allow two trials, recording the highest score.

Scoring

The score is recorded in inches. Distances above 12 inches should be recorded as 12 inches.

Suggestions for Test Administration

- Do not allow students to do ballistic, bouncing movements.
- Do not encourage students to raise higher than 12 inches. The Healthy Fitness Zone ends at 12 inches, and scores beyond 12 inches will not be accepted by the computer. Excessive arching of the back may cause compression of the spinal discs.
- Maintaining focus on the spot on the floor should assist in maintaining the head in a neutral position.
- Partner B should make the reading at eye level and, therefore, should assume a squat or lying down position.

(continued)

Trunk Lift (*continued*)



PHOTO 7.4 Starting position for the trunk lift.



PHOTO 7.5 Student in the "up" position for the trunk test.



PHOTO 7.6 Measurement of trunk lift.

Reprinted, by permission, from The Cooper Institute, 2007, FITNESSGRAM / ACTIVITYGRAM Test Administration Manual Fourth Edition (Champaign, IL: Human Kinetics).

FITNESSGRAM / ACTIVITYGRAM and the Healthy Fitness Zones are owned and copyrighted by The Cooper Institute and published by Human Kinetics. Reproduction of this material for any use other than for testing of students as stipulated by the state of Virginia is strictly forbidden. More information on FITNESSGRAM / ACTIVITYGRAM software and related resources can be found at www.fitnessgram.net.