

Cut Score Study Report

The proportion of items passed in the full set of 200 items, .700, which had been set as the standard, with a score of 140. The percentage of candidates passing the test was 84.7%. If the standard of a proportion correct of .70 was applied to either of the two reduced tests, a score of 126 or higher would be required to pass the test. It can be seen on Table 10 that the percentage of candidates passing differs on the two tests with 82.4% and 87.3%, respectively, on Reduced Test 1 and Reduced Test 2. This difference is not trivial for an operational test.

Thus, procedures to equate scores between tests are needed to assure a comparable standard. That is, equating procedures are needed to coordinate the proficiency cutline between the original full test of 200 items and the reduced tests of 180 items. In the IRT-based procedure, scores from the reduced tests can be mapped to scores on the full set of 200 items to determine proficiency. Basically, IRT competency level scores are mapped between tests to determine the raw score cutline.

Proportion of candidates passing and proportion of items correct at various cutlines.

Cutline Score	Proportion Items		
	Correct	Criterion 1	Criterion 2
123	.683	.850	.895
124	.689	.840	.886
125	.694	.834	.880
126	.700	.824	.873
127	.706	.815	.866
128	.711	.806	.857
129	.717	.796	.848
130	.722	.787	.840