

Design Evaluation Table for Instructional Goal, Terminal Objective, and Parallel Test Item

Instructional Goal: Given a 1:50,000-scale military map and a 1:50,000 grid scale protractor, soldiers and civilians will identify the six-digit grid coordinate accurate to within 100 meters with the square identifier.

Terminal Objective: Given a standard 1:50,000-scale military map, a 1:50,000 protractor, a pencil, highlighter, worksheet, and a point on the map, determine the six-digit grid coordinate for the point on the map with a 100-meter tolerance. After completing the 30-minute self-based training, the learner will record the grid coordinates and record the correct two-letter 100,000-meter-square identifier on the worksheet without error within the 100-meter tolerance.

Situation: You are an intelligence analyst assigned to the 513th Military Intelligence Brigade located at Fort Gordon, Georgia. Your commanding officer, Captain America, just received a report of an escaped super-villain and needs your help to plot the six-digit grid coordinates of his suspected hideout. The RQ7B Shadow drone will be sent to these coordinates to gather Intel. Captain America will need the six-digit coordinates in 15 minutes.

Criterion-referenced Test Item: Record, the six-digit grid coordinates, with the correct two-letter 100,000-meter-square identifier within the 100-meter tolerance in 15 minutes. Use the map sheet and protractor below.

Map Sheet: Harlem 1:50,000

Protractor Scale: 1:50,000

Design Evaluation Table for Subordinate Skills, Performance Objectives, and Criterion-referenced Test Items

Subordinate Skills	Performance Objectives	Criterion-Referenced Test Items
Starting from the left corner of the map read right to the north-south grid line that precedes point A 2.1	Given a 1:50,000 map, and a highlighter, the learner will identify the grid square right of the north-south grid line by highlighting the north-south line that is left of point A. 2.1	What is the two-digit north-south grid line number that is left of point A? <u>67</u> 2.1
Identify the two digit number of the grid line that precedes Point A 2.2	Given a 1:50,000 map, and a worksheet, the learner will determine the first and the second digit coordinate of point A and list without error the two-digit number onto worksheet. 2.2	What is the first and the second digit of the six-digit grid coordinate of point A? <u>67</u> _ _ _ _ 2.2
Following the east and west grid line moving up from the first two digit number identified in step two 3.1	Given a 1:50,000 map, and a highlighter, the learner will identify the grid square by highlighting the east and west grid line below where point A is located. 3.1	What is the two-digit east-west grid line number that is below point A? <u>85</u> 3.1
Identify the two digit number of the highlighted grid line that is below Point A 3.2	Given a 1:50,000 map, and a worksheet, the learner will determine the fourth and fifth digit coordinate of point A and list without error the two-digit number onto worksheet. 3.2	What is the fourth and the fifth digit of the six-digit grid coordinate of point A? _ _ _ <u>85</u> _ 3.2
Check to see the zeros of the protractor are in the lower left hand (southwest corner of the grid square where point A is located) 5.1	Given a 1:50,000 map and a protractor, the learner will align the intersecting vertical and horizontal axis of the protractor in the lower left hand corner of the identified grid square. 5.1	What are the two digit grids coordinates of the aligned protractor for the vertical axis (north-south grid lines) and horizontal axis (east-west grid lines)? A. The vertical two-digit coordinates is <u>67</u> B. The horizontal two-digit coordinates is <u>85</u> 5.1

<p>Identify the third-digit coordinate by sliding the scale to the right, keeping the bottom of the scale on bottom grid line until point A is under the vertical axis on protractor. On bottom scale, the 100-meter mark nearest the north-south grid line provides the third digit.</p> <p style="text-align: center;">5.2</p>	<p>Given a 1:50,000 map, and a protractor, the learner will utilize the protractor and manipulate the protractor to the right, keeping the bottom of the protractor on the highlighted portion of the grid line until Point A is under the vertical and right of the scale</p> <p style="text-align: center;">5.2</p>	<p>What is the third-digit 100-meter mark nearest on the north-south grid line? <u>5</u></p> <p style="text-align: center;">5.2</p>
<p>Determine the sixth digit coordinate, by looking at the 100-meter mark on the vertical scale nearest to Point A</p> <p style="text-align: center;">5.3</p>	<p>Given a 1:50,000 map, a worksheet, and protractor, the learner will determine the sixth-digit coordinate, by looking at the 100-meter mark on the vertical scale nearest to Point A and will list without error the sixth digit onto worksheet.</p> <p style="text-align: center;">5.3</p>	<p>What is the sixth-digit 100-meter mark on the vertical axis nearest to point A? <u>2</u></p> <p style="text-align: center;">5.3</p>
<p>Determine the correct two-letter 100,000-meter square identifier on either side of the 00 grid line and record the two-letter 100,000 meter-square identifier from the information in front of the six digit coordinate number.</p> <p style="text-align: center;">6.1</p>	<p>Given a 1:50,000 map, the learner will identify if there is more than one two-letter 100,000-meter square identifier by locating the grid reference square on map.</p> <p style="text-align: center;">6.1</p>	<p>Which is the correct two-letter 100,000-meter square identifier for the six-grid coordinates?</p> <p>A. LH B. LG C. LI D. LE</p> <p style="text-align: center;">6.1</p>