

## Numerical Reasoning Survey - UK

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### NRS Report of Results

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Candidate Name:	Lee Sample
Gender:	Male
Issue Number:	58666-76155
Date Test Completed:	30 April 2009
Duration:	25:38

## Scale Description

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This scale is concerned with numerical and arithmetic competencies. The emphasis in this assessment is on facility with numerical concepts and the fundamental arithmetic formalities. High scorers will be familiar with the conventions of notation, including powers, percentages, use of formulae and essential geometry. They will be comfortable working with formal computational processes and be able to appreciate their implications in the practical applications of their work.

### Percentile Score

Lee Sample scored at the 50th percentile, with a raw score of 41, compared to a sample of 3,000 people.

### Report

Lee's Numerical Reasoning Survey score is average compared to others. This suggests that Lee will have sufficient numerical aptitude and will cope with the number, calculation and mathematical concepts involved in his work. The breakdown of test scores according to item type may give some insight into particular strengths and weaknesses.

If Lee completed the Numerical Reasoning Survey unsupervised, this level of performance should be confirmed using the NRS Check Test presented at the end of this report.

### NRS Check Test

The NRS Check Test is a 15 item test; the items selected being the 15 most difficult items that the candidate answered correctly. The NRS Check Test for Lee Sample and a scoring key are attached to this report. The candidate should be allowed 20 minutes to complete the test under supervised conditions.

Test items are concerned with six discrete areas that are reported below.

## Number relationships

### Sample item:

What is the missing number in the sequence 1,4,9,?,25

Lee 's Score: 9/10

## Arithmetic notation

### Sample item:

True or False,  $0.01 \times 100 = 1$

Lee 's Score: 6/10

## Percentages

### Sample item:

Which is the greater, 15% of 1247, or 10% of 1600?

Lee 's Score: 5/10

## Geometry

### Sample item:

If a right-angled triangle has one angle of 35 degrees, calculate the third angle.

Lee 's Score: 7/10

## Problem solving

### Sample item:

How much time is saved by travelling at 80 mph rather than 50 mph on a journey of 200 miles?

Lee 's Score: 7/10

## Equations

### Sample item:

If  $y^2 - 4y + 15 = 20$ , find the value of y

Lee 's Score: 7/10

## NRS Check Test for Lee Sample

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The test below has just 15 items based on your performance when completing the NRS online. These items are pitched at the level at which you succeeded on that occasion, so they should not prove too difficult for you.

You will have 20 minutes to complete the test.

- 1 What is the area of a square with sides 3cm long?
- 2 How much time would be saved on a 200 mile journey by travelling at 80mph rather than 50mph?
- 3 If driving style increases tyre wear by 20%, instead of getting 12,000 miles from their tyres a careful driver could get how many miles?
- 4  $x^2+x^2=?$
- 5 If a 20 litre fuel tank is five eighths full, how many more litres is there room for?
- 6 If 1 in 10,000 of the population have a particular condition, what percentage is that?
- 7 With a promotional offer to "buy 2, get one free" on items with a normal price of 96p, how much would you pay for each?
- 8 What is the sum of the internal angles of a regular rectangle?
- 9 Are the connected sides of a parallelogram ever parallel to each other?
- 10 If  $V = R \times I$  then  $I =$
- 11  $(n - 4)(2n + 2) = ?$
- 12 If  $2x+y^2=3y+x$ , then  $x=?$
- 13 In the sequence 3, 9, ?, 100, 101, what is the missing number?
- 14 The external angles of a triangle add up to how many degrees?
- 15 In the sequence 0, 1, 2, ?, 26, what is the missing number?

## NRS Check Test Scoring Key

The following table provides the correct answers for all Numerical Survey Check Test items. This key will allow you to score Lee Sample's responses to the items in his individualised Check Test.

The items selected for each Check Test are equivalent to the most difficult items answered correctly online. Applicants need to achieve a success rate of about 73% of these items (i.e. a score of 11 or more) to confirm the aptitude suggested by their online test results.

You should expect some variation in Check Test scores. Lower than expected scores cannot confidently be attributed to the candidate having received help with the online questionnaire. High online scores will occasionally be achieved without help by a combination of luck and guesswork. Check Test results should be interpreted as follows:

Check Test Score	Interpretation
0 - 5	Online results are likely to exaggerate true ability - FAIL
6 - 10	Check Test provides only tentative support for online results - QUESTIONABLE RESULT This result is questionable, therefore we would recommend that you ask the candidate to take the online questionnaire again, under supervision. To do this, go to <a href="http://www.psy-key.com">www.psy-key.com</a> , choose 'Online Assessments', and enter the Access Code ncheck. Then ask the candidate to fill in the personal details requested and to go on to complete the questionnaire. As this administration of the test has been supervised you can have complete confidence in the result.
11 - 15	Ability suggested by online results fully confirmed - PASS

1	What is the area of a square with sides 3cm long?	9cm <sup>2</sup>
2	How much time would be saved on a 200 mile journey by travelling at 80mph rather than 50mph?	1.5 hours
3	If driving style increases tyre wear by 20%, instead of getting 12,000 miles from their tyres a careful driver could get how many miles?	14,400 miles
4	$x^2+x^2=?$	$2x^2$
5	If a 20 litre fuel tank is five eighths full, how many more litres is there room for?	7.5 litres
6	If 1 in 10,000 of the population have a particular condition, what percentage is that?	0.01%
7	With a promotional offer to "buy 2, get one free" on items with a normal price of 96p, how much would you pay for each?	64p
8	What is the sum of the internal angles of a regular rectangle?	360
9	Are the connected sides of a parallelogram ever parallel to each other?	no
10	If $V = R \times I$ then $I =$	$V/R$
11	$(n - 4)(2n + 2) = ?$	$2n^2 - 6n - 8$
12	If $2x+y^2=3y+x$ , then $x=?$	$3y-y^2$
13	In the sequence 3, 9, ?, 100, 101, what is the missing number?	10
14	The external angles of a triangle add up to how many degrees?	900
15	In the sequence 0, 1, 2, ?, 26, what is the missing number?	5