PASSING PSYCHOMETRIC TESTS

RACHEL MULVEY

passing psychometric tests

brilliant learning

By the end of this chapter you will:

1. understand what the questions in non-verbal/numerical reasoning tests are asking you to do
2. have a clear plan of attack to minimise your stress so you can maximise your performance in non-verbal reasoning.

7.1 What does numerical/non-verbal reasoning actually test?

Non-verbal reasoning tests focus on your use of reason and logic, to make sure that you can reach a justifiable conclusion by making sense of the information given, then working through a problem systematically, using reason and logic. 'Non-verbal' is used partly to distinguish these tests from verbal tests, but using 'non-verbal reasoning' as a label indicates that the test is not just about numbers but about using reason to work through a problem which is data based.

brilliant definition

Numerical and non-verbal reasoning tests
Numerical and non-verbal reasoning tests focus on your ability to use reason and logic on data presented as numbers and figures.

7.2 Why do employers use numerical/non-verbal tests?

Employers use numerical tests to see how you approach numerical problems and how you handle figures. Understanding whether profits are going up or down, or whether the wage bill can be paid from this month's income are everyday challenges

in business. So understanding numbers matters. Non-verbal reasoning is important right across the board because any company, large or small, profit-making or charitable, start-up or well established, has to make ends meet.

Employers usually provide an example of the test format they use so that you know what to expect; you can normally find this on the employer's website or on their recruitment literature. They may well be explicit about which test publisher they use so you can pinpoint exactly which you are going to encounter. That said, all non-verbal reasoning tests are doing the same job so just get practising – get your head round what is being tested and you will easily cope with test variants.

brilliant tip

Ask the employer or look at their website to check what test format they actually use.

7.3 Test formats can vary

The precise format of the test can vary, although all test the same numerical reasoning skill set. The practice questions included here will help you prepare for all kinds of numerical test, but make sure you check how the questions will be presented for the test you are taking.

What if maths isn't my top skill?

If you feel that maths is not your strong point, do not panic! The level of maths required is not impossibly high. Unlike a lot of the maths you learn at school, the maths necessary for these tests tends to be applicable to real-life situations, which is why employers want people who can do them. You do need to understand percentages and ratios and you will need to do

arithmetic – for which you might find some GCSE level revision guides useful, along with the practice and explanations in this text. Remember that what lies at the heart of these tests is how you reason and solve problems and that's what you need to get hold of.

brilliant recap

Numerical reasoning tests are used very widely by employers because they want to be sure you understand numerical data used in everyday work, no matter what kind of sector you're working in.

7.4 What to expect and how to prepare

What does a numerical test look like?

Numerical reasoning tests follow a pretty standard format. There will be a chunk of numerical data which could be presented as a graph, or in a table, or as a combination of the two. You will then have to use the data to answer a question, or series of questions, by choosing the correct answer in a multiple choice format.

You will, of course, need some basic maths skills, and the best way to bring these up to scratch is to practise before you take the test. Some people find that going back to their GSCE revision books is the most helpful thing they can do. Apart from basic arithmetic, you will need to be confident about calculating percentages, fractions and ratios. You'll also need to be familiar with different types of graph, whether that's a line graph, a bar or pie chart for example. Generally you won't be tested on more 'conceptual' mathematical questions such as geometry or complex algebra, unless of course you are applying for a job in which these skills are essential (engineering, for example).

What does a numerical test feel like?

Your task is to recognise what the data represents, understand what the question is asking for, and identify which data points you need in order to calculate the correct answer – all within a set time limit. This can be off-putting, especially when confronted with a combination of complex data, but remember that these tests are designed to make you feel pressurised because employers want to measure how you perform in that condition.

'Psychometrics are no fun, but they're not meant to be.'

Hannah, BSc Economics and Politics

You will need to work quickly and accurately, but if you run out of time it's not the end of the world; often the test design does not expect you to answer every single question. In any case, this chapter will help you develop a strategy to power through and maximise success.

brilliant tip

Don't worry if you don't answer every single question in the time given, but do use your time well.

7.5 Plan of attack

Familiarise yourself with the data

When you're up against the clock it can be tempting to scan over the data and concentrate on the question, but that can lead to oversights and silly mistakes. You shouldn't spend too long on the data, but it is important to grasp what story it is telling; what the various columns in a table mean or how the bars in a bar chart relate to one another. It's also a good idea to have a look at units

and orders of magnitude (e.g. 'in thousands' or 'per capita') as these can easily trip you up and lead to a wrong answer.

Read the question

This sounds obvious, but when you're nervous and under pressure it's easy to misinterpret what the question is actually asking. Take a deep breath and read the question over a couple of times. Again be especially careful with regard to units. There are key words in the question which signpost you to what you need to do; the first practice question shows you what to look out for.

brilliant tip

Take a minute to read the question over a couple of times, noting the key words that signpost what you need to do to get to the correct answer.

Identify the data you need in order to answer the question

It is likely that you will need to work with several different pieces of information in order to answer the question. For the harder questions you will often need to use the data presented to generate a new piece of data which is essential to answering the question. For example if the question asks you to calculate a change in GDP (gross domestic product) and the table in front of you only gives you GDP per capita and population size, you'll need to multiply the two in order to give you the GDP figure necessary to answer the question.

brilliant tip

Don't be scared off by number formats you're not familiar with, such as exchange rates; the numerical skills involved remain the same.

If you don't get it, move on

It's horrible coming up against a question that you just don't get. But given that you are against the clock the best strategy is to put it behind you and move on to the next question, because you don't have time to waste figuring it out. This can also apply to questions that you know will take a lot of working out; better leave it until the end if you think you might be able to answer two other questions in the time it would take you to answer that tricky one. If the test format allows to you mark the question, do that by putting a cross next to it on the answer sheet. If you're taking the test online, note it down on some rough paper so that you can go back to it at the end of the test once you have aced all of the questions you knew how to do and have those in the bag. Make sure that you do select an answer though, even if you have to guess.

brilliant timesaver

If you get stuck on a question, read it again carefully. If you still don't get it, move on.

Pick the right answer

With all the practice you've done you should be able to speedily and accurately perform the relevant calculations which will give you an answer that matches up with one of the multiple choices. If this isn't the case, make sure you are using the right units or that you have rounded up or down correctly according to the question.

Select an answer that makes sense

Be careful in selecting an answer that makes sense. If the question asks for how many cars, you need to look for a whole