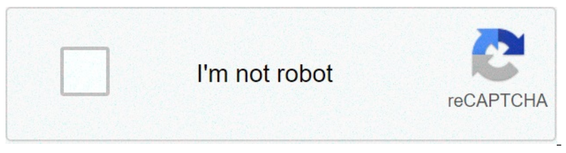

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Numerical and verbal reasoning test

Psychometric Success × It's a competitive job market out there, and employers are increasingly turning to numerical tests to help them make choices about whom to invite to interview. Our practice tests are created by the same psychologists who design tests for the likes of SHL, Kenexa, Talent Q, and Saville Assessment. So our test platform and example questions will give you a good feel for the numerical tests employers use. Performing your best in your numerical reasoning test is all about practice, and knowing what to expect! If you're doing an online application it's likely you'll have to sit a numerical reasoning test as they're an extrememly popular test for employers to use. Numerical reasoning tests assess a candidate's ability to handle and interpret numerical data. You will be required to analyse and draw conclusions from the data, which may be presented in the form of tables or graphs. The tests are timed and in a multiple choice format. Numerical reasoning tests differ from the sort of numerical tests you may be familiar with from GCSE or A level exams. The tests you will face are designed to measure your ability to problem solve, often mimicing the type of analysis you will be required to undertake in your future role e.g. Comparing the productivity of two different branches of a company. This type of workplace numerical data can often be tricky to understand if you are not familiar with it, so it's extremely important to take practice tests to familiarise yourself with these beforehand. The following images explain the format of an example numerical reasoning question: With thousands of job applicants to choose from, it's common for employers to use aptitude testing to sift the good candidates from the mediocre. The most common way for employers to use numerical reasoning tests is online, after they have accepted your CV or initial application form. If you pass your online test larger employers tend to then invite you to an assessment centre. Often employers ask you to sit a repeat test at the assessment centre to verify that you are indeed the same person who scored that great score on the online test, so don't get your friends to help with your online test! The best way to familiarise yourself with these tests is to take one of our free example numerical reasoning tests below. As well as taking example tests, you should read the advice and findings below on how these tests work and what they measure. By taking example numerical reasoning tests you will become familiar with the question format. Luckily for you most employers use a similar format of numerical reasoning test, which means it's easy to get some realistic practice beforehand. The great thing about the numerical reasoning tests used for employment selection is that they are not the same as a maths test. You don't have to remember complex formulae or write long proofs. The important characteristics of a numerical reasoning test are: Multiple choice answers - no longhand answers or showing your working-out. No prior knowledge required - no uncommon equations to memorise (or surreptitiously write on your arm). Strict time limits - some are generous while some are very short. Relevant to the workplace - modern tests are based on the kind of numerical information you would deal with in the job. Based on only the information given - you should not make assumptions about data you are not given. The following video is part 1 of our two part tutorial whereby we guide you through numerical reasoning questions highlighting the things to look out for: Try one of our free tests to see how they help you improve. Try a real numerical reasoning test. Give it a go to see how a real test works! This free numerical reasoning test contains 21 questions and has a time limit of 21 minutes. This test is rated as medium and is about the same difficulty as real numerical tests graduate employers use. Free Numerical Test 1 Questions PDF Solutions PDF It's easy to be fearful of numerical tests as it's often believed the maths involved will be very complex, however, this is not the case. The tricky part is interpreting the numerical data and figuring out what calculation is required, under the pressure of the count-down timer. You will be asked questions invovling the following 7 core mathematical principles: Addition Subtraction Multiplication Division Percentages (including percentage changes) Ratios Averages If you don't feel comfortable with any of these questions, focus your practice on that type of question. You could also dig out your GCSE notes if you still have them. And remember you can use your calculator and notes to help you if you're taking this online. We have over 700 numerical practice questions that are available to you to help remove any weaknesses you may have. Try to work both quickly and accurately during your test. Most tests don't employ negative marking but do check the instructions before you start. Whilst they might not tell you, bear in mind that your accuracy score is visible to the employer, so guessing answers will result in a low accuracy score and may suggest to the employer that your numerical work is prone to error. Research has shown that people who do well in their numerical reasoning test tend to perform better in the job. That's precisely why employers use them! Graduate and professional level numerical reasoning tests are the most difficult, reflecting the calibre of candidate they are trying to select. They still use only the seven basic maths skills listed above but they require you to analyse and interpret more advanced data, and they have several steps to the same question. When you are invited by an employer to take a numerical reasoning test, try asking which test publisher they are using. You can then go to that test publisher's website to get more information and possibly example test questions. Some HR staff are surprisingly helpful with this. To help with this, we have conducted some market research, and from our 2020 data found that SHL are the most popular test publisher for hiring companies to use: If you are taking a numerical reasoning test in the UK, the chances are it will be written by one of those companies; we have a breakdown of the popular companies below: 1. SHL Verify Ability Tests - SHL (now part of CEB) are the most widely used test publisher so you are likely to come across their tests during your job hunt. Their numerical tests have a time limit of between 17 and 25 minutes so you will need to work quickly and accurately to perform well. 2. Kenexa Ability Tests - Kenexa are part of IBM and are another large test publisher. Their numerical tests look to the candidate very similar to those from SHL. So if you practice for a Kenexa numerical test, you will be well prepared for an SHL test, and vice versa. Kenexa typically allow candidates 20 minutes to answer 24 questions. 3. Talent Q Elements Numerical Ability - the big difference with these tests is that they are adaptive. That is to say the difficulty of each question is automatically determined by your performance in the previous question. So the questions become more difficult as you progress in order to quickly find your level of numerical ability. A typical time limit is 90 seconds for questions with a fresh set of information and 75 seconds per question after that. Also the number of multiple choice options is a lot greater compared with what you might be used to from SHL, making it more difficult to make a best guess. 4. Criterion Partnership Utopia numerical critical-reasoning test - these tests have an environmental theme. There are 30 questions with a time limit of 45 minutes but beware the questions get progressively more difficult. 5. Cubiks Reasoning for Business - designed to test candidates' business-orientated numerical reasoning skills. You usually get less than a minute per question. 6. TalentLens Rust Advanced Numerical Reasoning Appraisal (RANRA) - aims to measure deduction and evaluation skills as well as numerical ability. Time limit 20 minutes. This test is often given in combination with the Watson Glaser Critical Thinking Appraisal. 7. TalentLens Athena Numerical Reasoning Assessment - one of the few tests which used advanced Item Response Theory. Contains 21 questions and has a time limit of 30 minutes. One of the key differentiators here is that candidates have to enter their answers in a free-text field box instead of picking from multiple choice options. So type carefully!. 8. Mendas Financial Reasoning Test - a mix of verbal comprehension and financial ability. Slightly more information to take in compared with standard numerical tests. There are 22 questions with a time limit of 35 minutes. Used by the FCA, similar to the new financial reasoning test being used by the NHS. 9. Bespoke numerical tests - many larger companies prefer to have their own tests created which closely match the situations candidates can expect in the job role. These tests vary slightly in style and time limit but you will still benefit from practising the industry-standard tests we have on offer. If you are wishing to apply to a certain company then you may find our companies profile index useful. We have the collection of test-types you are likely to face if you are applying for 60 of the top employers. The most important way to prepare for your test is to take practice questions because this will reduce the element of surprise and will allow you to perform to your true ability. But don't stop there; adopt these test-taking techniques to really make sure you shine on the day. Practice - practice does make perfect! Find out more about the test - ask the employer which test you are taking and if they have any practice material. Be calm and refreshed - when the clock is ticking you need to be 100% alert to pick up all the marks you can. Arrive in plenty of time - this only applies to tests you take at an assessment centre. You won't perform your best if you're flustered and out of breath. The following video features Ben talking through our advice for tackling a numerical reasoning test: For further information check out our Numerical Reasoning Test Tips. So, you've prepared for your numerical reasoning test, how should you approach the questions when you are taking your test for real? As well as practice, there are some strategies to think about which might help. 1. Listen to instructions carefully - before your test begins the test administrator will read out the instructions. It is very important you pay attention to these and that you understand them. This is your opportunity to ask questions. You will not be allowed to ask questions once the test has started. 2. Get the most from practice questions - before the test starts you usually have a few example questions. These are not timed but there to get familiar with the test layout. Take your time to understand these questions and feel free to ask questions at this stage. 3. Ignore other people - don't let yourself become distracted by how quickly or slowly other people are answering the questions. It is important to focus on what you are doing. 4. Beware the multiple choice options - most multiple aptitude tests have what are called distractors. These are options which are deliberately similar to the correct answer or the answer to a silly mistake. Beware of these; they are designed to test if you are reading the question properly. It is in the interests of the employer to treat all applicants fairly; after all they don't want to overlook potential talent. Every employer must receive your informed consent to be tested, which in practice means providing you with information on: The nature of the test and what it is designed to measure. The relevance of the test to the job you are applying for. How the results of the test will be used in their selection decision. Who will have access to the results and how long will results be stored. Whether you will be provided with feedback after your test. Should your test time be adjusted? For example candidates with disabilities are sometimes entitled to extra time to complete their test (this can include dyslexia). Some test publishers prefer to give all candidates the same time limit but then make a judgement on whether raw scores should be adjusted. Employers aim to be fair to all candidates and want to avoid being accused of positive or negative discrimination. If you do have a disability, get in touch with the test administrator and they will make sure you are treated fairly. If you are not happy with anything you are being asked to do, make sure you say something before you sit your test; otherwise they might just think you want to make excuses for a perceived bad performance. If a job requires working with numbers and numerical information, the employer would be sensible to use numerical psychometric testing to predict which candidates are likely to perform well in the role. If a role doesn't require strong numerical skills, the employer shouldn't be using a numerical test as a selection criteria. From our study, we found that numerical reasoning tests are most commonly used early on in the application process, likely before you have had any interviews. This is because many aptitude tests are used as a means of reducing the size of large candidate pools by filtering out those with weaker cognitive ability. We know how much importance employers place on numerical reasoning ability, we also know that performing your best under strict timed conditions can be difficult. That's why we want to open up the test process and let you know what to expect. Practice can mean the difference between securing that position and losing it. Our practice tests will ensure that you're fully prepared for your real test, letting you relax and perform to the best of your ability. You'll have a much better idea of what to expect and will be able to get your numerical reasoning skills up to scratch, hopefully leaving you in a much better position than you would otherwise be. So, if you're looking for a way to improve your aptitude test score, practice can help significantly. Since our practice tests are designed by experts, they could make all the difference. Yes, for the typical graduate or middle-management numerical selection tests. But there's no harm in asking the employer this question before your test to ensure that during your practice, you can either use one or practice your mental arithmetic. If you are taking your numerical reasoning test at an assessment centre everyone will be lent an identical calculator to use to standardise the testing experience. Most test administrators do not allow the use of your own calculator, however it is a good idea to take you own just in case they do allow it. By using your own calculator you will be familiar with the button layout and functions so you will save a few vital seconds during your test. If your test is online, obviously you get to use your own calculator. Q: How to calculate ratios in numerical reasoning tests? A ratio for numerical reasoning is a comparison between two or more numbers. It shows how these numbers relate to each other. For example, 4:5, this shows that for every 4 of one thing there are 5 of the other. These could be written with colons or as a fraction. Once you understand the premise of ratios, the best way to master them is to practise. You can find ratio questions within our numerical reasoning tests.Q: Will I get marked down for incorrect answers? This is a frequently-asked question by candidates is "will negative marking be used?" Most candidates want to know if it is sensible to guess the last few questions if time runs out. The answer is that negative marking is unlikely to be used, but accuracy will be assessed so don't just frantically click answers in hope. Some online tests have software which tries to detect guessing and will flag this up to the assessor. Even if they don't know that you're guessing, you are risking a low accuracy score, which might reflect badly on your attitude to work. Few assessors will reveal whether negative marking will be used, they will just say "try to answer correctly as many as you can". The test results will tell the assessor what percentage of attempted questions you got right. Some companies will be looking to select candidates with accurate and consistent results, while others will be more interested in quantity of correct results and speed. Have a think about what sort of person they are looking to recruit. Q: Should I get my friends to help with my online test - surely they'll never know? Application processes that require the candidate to sit an online numerical reasoning test and then subsequently another follow-up test at the assessment centre often use candidate verification methods. This is an automatic system which tries to verify that the online test was indeed completed by the same candidate that attends the assessment centre. So don't get your friends to help with your online test because they will probably work it out when you attend the assessment centre!