



Numerical Reasoning Tests - 2021 practice

Numerical Reasoning Tests – Key Facts

- The purpose of **Numerical Reasoning Tests** is to sift out candidates (usually scores below the 31st [percentile](#)), or to give additional information about their potential for a role before moving into more time and resource dependent stages like an [interview](#) or an [assessment centre](#)
- Most employers use **Numerical Reasoning (NR) tests** along with other tests such as; [Verbal](#) or [Logical](#) reasoning. These can be used at any point during the assessment process but commonly appear at the start
- Solving **Numerical Reasoning Tests** tests require some mathematical understanding on basic arithmetic, percentages and ratios. Calculators are typically allowed in **Numerical Tests**
- There is no negative marking in Numerical Reasoning Tests. Taking a guess on the questions you're unsure of could work in your favour
- Our tests are designed by [previous SHL and Kenexa consultants and test developers](#). GF tests therefore give you a realistic experience of the real thing. [Take a FREE test](#) and get an expert personalised report with answers and fully worked solutions to aid your learning.

You do not need to have a large variety of tests to improve **numerical reasoning skills - focusing on a handful of tests repeatedly** using our breakdown of the solution will encourage deeper learning and understanding, which is better than spreading yourself thinly across say 15 Numerical Reasoning tests.

Check out this short video clip to get you started with numerical tests:

Video: What is a numerical Reasoning Test

What is a Numerical Reasoning Test

1. **Numerical Reasoning Tests** are used by employers to assess your reasoning ability when it comes to applying for a job.
2. Employers are keen to identify how capable you are at reasoning with numerical information presented in charts, graphs and tables to determine the correct answer to a question.
3. Numerical reasoning requires no more than basic mathematics including that of ratios, percentages and basic arithmetic.

What do Numerical Reasoning Tests measure?

Numerical reasoning tests (NR) are designed to measure your ability to make correct decisions from numerical or statistical data presented in tables, graphs and charts. You are required to use the information presented in such formats and 'reason' with it to select one of the 5 response options provided.

This means each question is looking for you to correctly analyse and pull apart the data given in each scenario, and then apply basic mathematics. Usually only one option is the correct answer, unless stated otherwise.

Although a basic understanding of maths is required as pre-requisite for Graduate and Professional tests, it is actually the **reasoning and application of the data** given that is being assessed. This is contrary to the popular belief that NR tests focus on measuring your math skills which is what one can expect if they were asked to complete a 'Calculation' assessment.

How to pass a Numerical Reasoning Test? 5 key tips.

Numerical tests are daunting, and whilst you cannot magically increase your ability, there are a handful of things you can do, that will give you a head start. Here are 5 things you should not forget to do!

1. Refresh basic maths such as:

- Basic arithmetic
- Percentages
- Ratios
- Fractions
- Estimates
- Data manipulation especially related to time, currency and measurement

Take the time to practice these areas before taking the test to help boost your chances of performing confidently on the test.

2. Practice numerical reasoning tests to get familiar

Numerical reasoning tests measure **how** you 'reason' with the data provided. Application of basic mathematics is a key factor to succeed.

Practice and preparation is critical to your success!

Author

Whilst research shows that practising may not significantly improve one's aptitude or ability, it is however an accepted fact that unfamiliarity with psychometric tests can hinder you from performing at an optimum level.

3. Improve speed and accuracy –

Practicing can help you manage your time effectively as both **speed** and **accuracy** is essential for success.

To perform well, it is important that you work quickly and accurately. Test takers who have practised have a much better chance of demonstrating their fullest potential, than those who have not practised.

4. Use GF Performance Reports to enhance your performance

Our reports provide data driven insights based upon your performance and make recommendations on how you can improve your performance in Numerical Tests. You can store your reports online and access them anytime whilst tracking your performance as you improve. By continuing to practice and applying the suggested recommendations, you can enhance your chances of a successful performance on your actual test.

5. Get properly organized for the actual test:

- Find a quiet space. No interruptions, noises, music in the background. Focus is key since you will have a limited amount of time to complete the test. Make the most out of the available time.
- Check that you have the right materials. Numerical tests involve using a calculator. Be sure to pick one that you're comfortable using.
- Check that you have a strong WiFi connection. Many tests can log you out and restrict you from accessing the assessment again.
- Remember to work through the questions quickly and accurately. Read each question carefully and work through them with a level of speed to manage your time.

Fed up with reading? Take a break and watch this short video with **5 top tips and tricks to pass numerical tests:**

Video: Top 5 Numerical reasoning Test Tips and Tricks

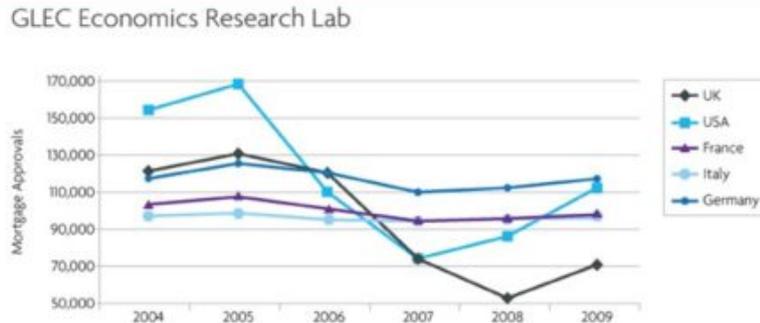
Here is an example of a Numerical Reasoning question that you can expect at the Graduate / Managerial level:

Numerical Reasoning Question Example with an Answer

Take a [FREE](#) test here to help you get started.

Find below examples of our (GF) numerical reasoning questions, answers, worked solutions and reports.

Example Industry-Standard Numerical Reasoning Question. Developed by previous SHL and IBM Kenexa experts.



What was the total (approximate) number of mortgage approvals for the USA and Italy combined, through the years 2005 to 2007 inclusive?

- A** 290,000
- B** 355,000
- C** 640,000
- D** 720,000
- E** 1,284,000

Learn from answers, and detailed worked solution for every question.
Analyse, improve, and pass.

GLEC Economics Research Lab

What was the total (approximate) number of mortgage approvals for the USA and Italy combined, through the years 2005 to 2007 inclusive?

A 290,000 **B** 355,000 **C** 640,000 **D** 720,000 **E** 1,284,000

CORRECT ANSWER - C
YOUR RESPONSE - C

Explanation

- Step 1** Add the 2005 rates for the USA and Italy. Therefore $170,000 + 95,000 = 265,000$
- Step 2** Add the 2006 rates for the USA and Italy. Therefore $110,000 + 95,000 = 205,000$
- Step 3** Add the 2007 rates for the USA and Italy. Therefore $75,000 + 95,000 = 170,000$
- Step 4** Add the totals from steps 1, 2 and 3. Therefore $265,000 + 205,000 + 170,000 = 640,000$

Personalised report with tips to pass. Compare yourself with thousands of other test takers.

Download PDF

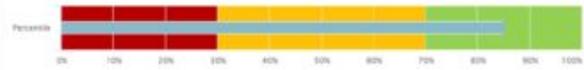
NUMERICAL REASONING TEST REPORT

Well done for completing NRT1. This report provides you with valuable feedback on your performance.

HOW WELL DID YOU DO?

Number correct	Percentile	Grade	Date Taken	Time Remaining
14	85	B - Good	10/02/2020 14:08:35	11 mins 12 secs

Percentile Score Chart



ANSWERS TO QUESTIONS AND STEP-BY-STEP WORKED SOLUTIONS

Below, we have provided an overview of the questions that you answered correctly and those that you got wrong.

Question Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Result	✓	✓	—	✗	✓	✓	✓	—	✓	✓	✗	✓	—	✓	✓	✓	✓	✓	✓	—

To reveal the explanation for questions answered incorrectly, please click on the ✗ icon for each corresponding question.

To help you with your numerical tests preparation we recorded a video with 5 most common questions and worked solutions. These 5 question types account for roughly 70-80% of all the numerical tests questions you will get in recruitment assessment tests.

Watch the video, study the step-by-step worked solutions presented, then practise tests. You should easily pass any numerical test.

Video: Numerical Reasoning Test Practice Questions and Answers | 5 Worked Solutions & Tutorial.

Top 3 reasons why employers use numerical reasoning tests

In the real world, professionals have to make lots of decisions in the workplace, much of which are driven by numbers.

You may be asked to look at how successful a particular product is, how much revenue is being generated, or whether a particular location is performing better than others. Regardless of these examples, you will need to reason with numerical data regularly in your job.

Here are our Top 3 Reasons for why employers use numerical reasoning tests.

1. To measure your ability in numerical reasoning.

- This involves interpreting numerical data presented in graphs and tables. Can you use and interpret the information provided to arrive at the correct answer?

2. They are reliable and predictively valid.

- This means that numerical reasoning tests can help provide the employer with a strong indication of a candidate's numerical reasoning ability and indicate whether you will be able to deal with numerical information effectively once employed.

3. To sift out candidates, especially at the beginning of the recruitment process when thousands of job applicants may be involved.

- Numerical tests used in conjunction with other tests, can easily allow for the reduction of very large number of applicants, which would otherwise be unmanageable. These tests are able to reduce the applicant group by half safely whilst remaining legally defensible.

Video: Top 3 Reasons Employers use Numerical Reasoning Tests

Why You Should Practice For a Numerical Reasoning Test

1. Numerical Reasoning Tests are not designed to be easy.

2. **You'll have limited time to answer challenging questions on a range of different topics.**

- Familiarity will help you overcome time pressure.

3. **You'll have competition.**

- In line with industry recommendations, you can be sure other candidates have already started to practice. It's always best to practice beforehand to make sure you're ahead of the game.

4. **It'll take time to master your personal approach.**

- You need to balance **Speed** and **Accuracy**. Practicing tests can help you find that balance.
- You don't want to answer too quickly and increase the risk of getting something wrong, but you don't want to move too slowly either.

Video: Why You MUST Practice Numerical Reasoning Tests

Why practice Numerical Reasoning Tests with GF?

All of our results are based on 'Normed' scoring (see '[Glossary](#)'). At GF, we provide the most detailed feedback reports available online with a breakdown of your performance across various types of questions so that you can identify which areas you may need to improve in.

Many organisations use SHL tests as they are the leaders in the design and development of psychometrics assessments worldwide. Whilst other online companies claim to offer 'SHL style' tests for practise, these are far from the real thing. Tests available online at GF have been designed by the [same experts who have previously designed tests for SHL](#). We are confident that you will not get another SHL style experience anywhere else other than at SHL itself.

Practice NOW. Get ahead. Graduates First.

