This short guide is aimed at supporting you with the NRT element of our application process, with key tips on how to prepare for the NRT. You’ll be informed on:

1. What is an NRT?
2. Why do we assess it?
3. How to prepare for NRT?
4. How to do well (key tips)
5. Practice Exercises

We want to make sure you feel confident, prepared, and motivated to sit the NRT.
1 What is a Numerical Reasoning Test (NRT)?

- Numerical reasoning is the ability to understand and work with numbers in a variety of forms, such as currency, percentages and ratios.
- It refers to both an individual’s mathematic ability and their ability to logically analyse numerical information.
- It uses hypothetical scenarios and data to provide context to the question.
- It uses questions of different types – some you have to pick one correct answer, others you have to rank, and some you’ll have to insert your answer.

2 Why do we assess it in our application process?

- At EY-Parthenon, we offer value to our clients by generating insight from data, so we measure numerical ability as we’re looking for people who can understand and interpret numerical information in a wide range of formats (we don’t expect you to be an expert, but we want you to be number savvy).
- We want to make sure you’re able to evaluate, analyse, and interpret numerical information in order to provide solutions to problems.
- Numerical proficiency is key to success in the professional qualifications we provide access to within each of our programmes.
- Your first exposure to numerical reasoning in the application process is in the Numerical Reasoning Test (NRT).
How to prepare for the NRT?

**Practice is key**

Use like for like practice tests to get used to the style of questions, and get used to things like percentages, decimals, and ratios. Check out this [website](#) for practice tests.

**Develop your Accuracy**

It’s important to get as many questions as you can correct. As you practice, try to answer as many questions as possible. This may help you identify areas you may need to build your confidence in.

**Rejig your memory**

If you’ve not practiced maths in a while, or if you haven’t completed an NRT before, familiarise yourself with different formats of data, like tables bar charts and pie charts.

**Develop your speed**

As well as your accuracy, it’s important that you work quickly too. Focus on what the question is asking you to do and then use this to run your calculations effectively. This is a key skill to help you get to the answer quicker.
4. How to do well - hints and tips to help you succeed

How to do well in the NRT?

Stay focused
- Find somewhere quiet, free from distractions, and where you work best
- There's 12 questions in total, so you should only need 20-30 minutes to complete the test

Be prepared
- Have a calculator, pen, and paper to hand so you can jot your notes down
- Have a good internet signal - you need to complete the test in one sitting

Get there quickly
- Remember that both your speed (the time it takes for you to complete the question) and accuracy of your answer contributes to your overall score

Check effectively
- Be flexible when checking your answers before submitting them - under pressure it can be very easy to second guess yourself, so make sure you only check it if you really need to
- Remember it will cost you time by checking your answers, which will affect your overall score
Practice Exercises

To give you the chance to do some practice, below shows some examples of the format and style questions you can expect to see in the NRT, and how to answer them effectively:

Example Question 1:
This table shows you predicted sales figures for this month and the percentage of these sales expected to come from each department. Half-way through the month, Reading has only achieved 37% of their target for Homeware.

How much more will they need to sell to achieve this target?

<table>
<thead>
<tr>
<th></th>
<th>Predicted sales</th>
<th>%clothing</th>
<th>%homeware</th>
<th>%toys &amp; games</th>
<th>%other</th>
</tr>
</thead>
<tbody>
<tr>
<td>London</td>
<td>£600,000</td>
<td>39%</td>
<td>41%</td>
<td>14%</td>
<td>6%</td>
</tr>
<tr>
<td>Southampton</td>
<td>£475,000</td>
<td>57%</td>
<td>16%</td>
<td>19%</td>
<td>8%</td>
</tr>
<tr>
<td>Reading</td>
<td>£525,000</td>
<td>48%</td>
<td>23%</td>
<td>22%</td>
<td>7%</td>
</tr>
</tbody>
</table>

To answer this question:

▸ start by calculating the sales target for Homeware in Reading: £525,000 x 23% = £120,750.

▸ Next, calculate Homeware’s sales so far this month: £120,750 x 37% = £44,677.50.

▸ Finally, subtract Homeware’s sales from the target: £120,750 - £44,677.50 = £76,072.50.

▸ Reading must earn a further £76,072.50 through Homeware sales to meet its target.
Example Question 2:
Which share had the largest difference between highest and lowest price over the last 12 months?

A. Huver C.
B. Dresbs Ltd
C. Fevs Plc
D. Fauvers
E. Steapars

To answer this question:

- The information we need is shown in the table Share Prices.
- Calculate the different between the maximum and the minimum prices.
  - Huver Co.: $1360 - 860 = 500$
  - Dresbs Ltd: $22 - 11 = 11$
  - Fevs Plc: $1955 - 1242 = 713$
  - Fauvers: $724 - 464 = 260$
  - Steapars: $2630 - 2216 = 414$

- **Tip:** Notice the wording of the questions is asking for the share with the largest absolute change in price, NOT the largest percentage change, which would have been Dresbs Ltd. If the question had wanted the percentage change it would have used the word percentage. So, the correct answer is (C) Fevs Plc
Want to find out more?

- Visit our website to find out more about EY-Parthenon. You will also find details of our recruitment processes, FAQs and a list of all of the events we are running.