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The Insider's Dossier: Brain teasers & puzzles in Job Interviews 140 interview problems

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squeaker.net

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Introduction

Congratulations on becoming the proud owner of the international version of the book »The Insider's Dossier: Brain teasers & puzzles in Job Interviews – 140 Interview Problems«. Whether you've bought this book as preparation for a job interview, or simply as an intellectual challenge, we'll introduce you to the most popular brain teasers used by some of the world's leading organizations.

This book aims to help you solve brain teasers successfully. But at the same time, it's more than just a guide for job hunters. With practice, you'll see that it can be great fun getting your head around tricky problems and training your mind to deal with all sorts of scenarios, whether or not you're attending a job interview in the near future.

The problems in this book are mainly those used by consulting companies, banks, companies from the consumer industry, as well as tech companies and business schools. Some have already been discussed within the framework of the online career network squeaker.net or nicube.com. Others have been researched from companies and job hunters and we've developed some suggestions for solutions ourselves.

Thanks to the online career networks squeaker.net and nicube.com, we're able to ensure that our book provides up-to-date examples and information about the sort of tests you'll be faced with at interview. The amount of information in the networks prove that brain teasers have become a regular part of interviews, and are more and more frequently becoming part of the standard procedure when it comes to banks, consulting and tech companies.

If you know more brain teasers, or alternative solutions, feel free to share and discuss them with us in the network: à squeaker.net.

We hope this book provides you with many hours of fun - and ultimately career success!

The squeaker.net editorial team

Note:

These types of brain teasers are used by international organizations throughout the world. Whilst most of them come from US companies, the same questions are asked in Germany, the UK, India, China, France, Australia, Dubai, South Africa, Spain, or wherever. Whilst details may vary, the main methods of reaching the solutions are the same. Due to the international nature of this book, we use metric measurements in the examples. In an interview in your home country, expect whichever measurements are usually used in your country to be used.

What is a brain teaser?

Brain teasers are logical problems which test your ability for analytical, autonomous and logical thinking. They're usually in the form of a short anecdote and encourage you to use your ability to solve problems in an unknown, unusual and possibly even totally unreal situation. In many ways, brain teasers are like mathematical problems that we all remember from school: you use your every-day knowledge and your logical ability to solve an abstract problem.

What's fun and intellectually challenging is the fact that, at first, brain teasers seem impossible to solve (or at least impossible to solve correctly), and yet all of them have a logical solution. Once you're set before a brain teaser, you just have to find out the answer!

Why do organizations use brain teasers?

Certain types of organizations regularly use brain teasers for job interviews. Watch your friends try and solve a brain teaser. In no time at all, you'll notice their individual ability and motivation and how differently each of them goes about solving the brain teaser. This is exactly what HR wants to do when using a brain teaser in an interview: they want to see how you deal with a tricky problem, and whether you can analyze it and deal with it in a structured manner.

At the same time, recruiters can determine how a candidate copes with the stress of a difficult, unusual situation, and how he or she expresses himself: i.e., not only is the candidate able to understand, structure and solve the problem, but can also explain it to others. Brain teasers also give the interviewer an idea of how the

candidate copes when he or she doesn't immediately find a solution to the problem.

Brain teasers sometimes serve as an alternative to intelligence tests, allowing companies to test the mental ability of candidates. Whether or not they're really a suitable alternative is a bone of contention.

For organizations, however, brain teasers have the advantage of not only allowing them to test the candidate's general intelligence, but also of showing them whether this person is actually in a position to be able to solve and deal with real problems. What they're looking for is the basic ability to solve problems rather than the specific qualifications that may be required for the job.

Which organizations are likely to use brain teasers?

Brain teasers at the level we're looking at in this guide tend to be used for candidates with a university education. They're most often used for recruitment within the investment banks but are also frequently used by consulting companies. You can also expect brain teasers for any position involving autonomous, analytical skills: that may be in marketing, in the tech area or in logistics, as well as in controlling or finance. We've also heard of brain teasers sometimes being used by private universities and business schools, as well as some start-up companies.

Depending on what sort of a job you're applying for, companies may also require certain professional or subject-related qualifications without which you'd be unable to solve the problems they put before you. As a business or economics graduate, for example, you should be able to calculate turnover and profit. And if you're applying for a position in programming, then it's fair to assume that your employer will expect a greater depth of mathematical ability than for your average candidate.

But not all consulting companies and banks use brain teasers. Don't be disappointed if you don't get one at interview: they will rarely play a major role in the recruitment process. But, of course, if you're lucky enough to be given the opportunity to shine, then why not do it?

How do I best deal with brain teasers?

Candidates require a variety of skills to solve brain teasers. Companies want to test mathematical understanding, logical thinking, creativity and the ability to think out of the box. Most brain teasers can be solved without any specialist knowledge or expertise. It's rare for companies to be looking for mathematical formula or scientific laws. But no matter what the problem, it's possible to practice the right way to deal with these types of problems.

When using brain teasers, organizations are looking for candidates' ability to think in unusual ways. You'll very rarely be able to find the solution immediately, and watch out if you do, because it's probably wrong! Indeed, the more obvious the answer, the more likely it is to be wrong. Some sort of trick will nearly always be hidden in the text. That doesn't mean that you can't express the obvious answer in an interview: just don't forget to mention that you think it's probably not the correct one. Then go on and look at why the answer is wrong and start structuring the problem in hand.

Often, the candidate will get heaps of information in a brain teaser that's totally irrelevant. By the same token, the really relevant information may be hidden in a seemingly unimportant sentence or word. Sometimes, the difficulty of the brain teaser is the way we unintentionally interpret information into a text which isn't even there because it just seems so obvious to us. Thus, the most important first step is to have a really good look (or listen) to the problem and check the content and relevance of every single word.

It's also not only important to read the text of the brain teaser very carefully, but also to continuously check every step. If you've solved a mathematical problem, then check it again to make sure that you've taken into account all the circumstances, and check whether your formula really was correct. And when you've done that, check that your correct answer does actually makes sense, or whether there may be other physical restrictions which aren't mentioned in the text but implied, or simply to be expected in reality. For example, you'll see in one problem in this guide that whilst it's possible to make a dog run at the speed of light using mathematical formula, this isn't feasible in reality!

But don't get too disheartened if you don't really understand the brain teaser: the stories used are often pretty absurd. Don't get put off because reindeers suddenly start flying, but just accept it as a given. And remember that, whilst companies are certainly looking for creativity, you shouldn't let your imagination run wild by making assumptions that are not mentioned in the text, and you shouldn't start taking routes that are obviously not being asked for!

Make sure you look for solutions and not just for mistakes in the question! You will always be given all the information you need to solve the problem.

Many brain teasers seem impossible to solve at first. Candidates may well be put off by questions which don't make it clear whether there really is a solution to be found. Always assume, even with these questions, that there is an answer to the brain teaser. This is nearly always the case. If you really believe there is no solution, then make sure you can justify your case. Don't be put off by open questions: just try and solve them using the strategies that we set out for you in the following chapters.