

Preparation Guide

Numerical Analysis

This preparation guide helps you to prepare for numerical analysis aptitude tests. It provides guidance on how best to approach the test, allowing you to give your best possible performance.

Why are Aptitude Tests used?

Employers often use aptitude tests as part of their assessment procedures for the selection and development of staff. Research has shown that they are powerful predictors of performance at work.

Tests help you to:

- demonstrate your strengths
- be assessed fairly on job relevant criteria
- find out more about your strengths and development needs
- make future career decisions based on your abilities

Tests help employers to:

- select people best suited to the demands of the job
- identify areas where individuals might benefit from further development
- obtain objective information about people's abilities

Instructions

On the following pages are some practice questions that are similar to those you will be presented with in the actual test. Completing these will help you to understand the types of questions used and to gain experience in taking ability tests.

These questions are designed to assess your ability to understand numerical information. You will be presented with a series of tables and graphs, each followed by several questions. Your task is to choose the best answer to each question from the options given, based only on the information provided.

Have a pen and paper to hand to indicate your answers and make notes.

You may use a calculator.

The actual test is strictly timed. Try to complete each set of **4** questions within **3** minutes.

Turn to page 2 and begin.

ANNUAL SALES REPORT

| CHANNEL | Volume of Sales (Millions of Units) | Average Number of Units Purchased per Transaction | Percentage of Transactions by Repeat Customers |
|----------------|--|---|--|
| Retail Outlets | 4,380 | 365 | 60% |
| Online | 2,232 | 155 | 23% |
| Mail Order | 1,512 | 2,100 | 72% |
| Telephone | 972 | 270 | 35% |

1 What was the total volume of sales (in millions) for Online, Mail Order and Telephone channels combined?

A 2,525 **B** 4,716 **C** 7,241 **D** 9,096

2 If Online sales volume increases by 14% next year, what will be the **approximate** volume (in million units)?

A 312 **B** 2,232 **C** 2,246 **D** 2,544

3 The Online sales channel had the lowest proportion of transactions by repeat customers during the year.

A True **B** False **C** Not possible to say

4 How many Mail Order transactions were made during the year?

A 7,200 **B** 72,000 **C** 720,000 **D** 7,200,000

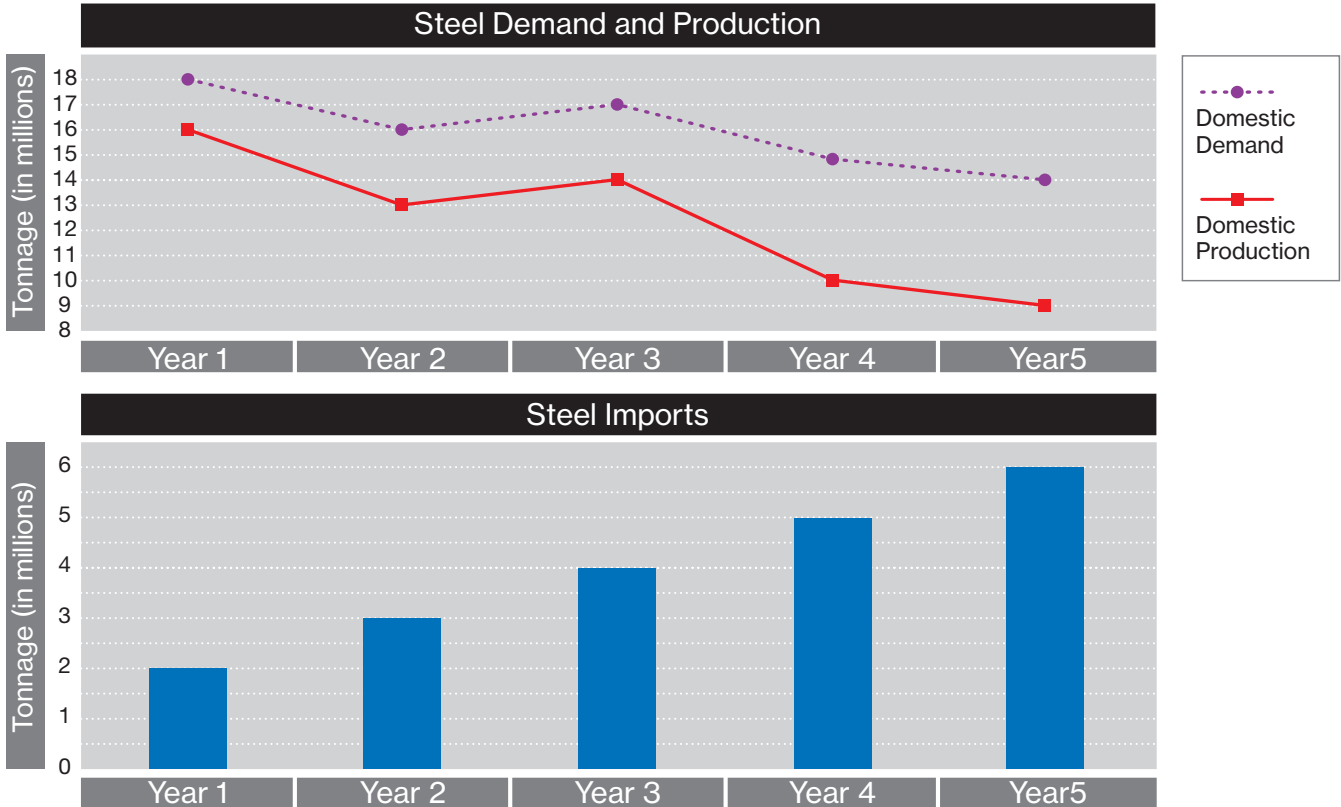
Answer Section Page 2

1 A B C D

2 A B C D

3 A B C

4 A B C D



5

In Year 4, **approximately** what tonnage of steel (in millions) was used by the automotive industry if it represented **15%** of domestic demand?

- | | | | |
|------------------|------------------|------------------|------------------|
| A 0.60 | B 0.75 | C 1.65 | D 2.25 |
|------------------|------------------|------------------|------------------|

6

What was the ratio of domestic production to imports in Year 4?

- | | | | |
|-----------------|-----------------|-----------------|-----------------|
| A 2:1 | B 3:1 | C 1:1 | D 1:3 |
|-----------------|-----------------|-----------------|-----------------|

7

Approximately what percentage of domestic demand was met by imported steel in Year 2?

- | | | | |
|-----------------|-----------------|-----------------|-----------------|
| A 11% | B 15% | C 19% | D 23% |
|-----------------|-----------------|-----------------|-----------------|

8

By what percentage did total imports increase from Year 1 to Year 5?

- | | | | |
|------------------|------------------|------------------|------------------|
| A 100% | B 150% | C 200% | D 300% |
|------------------|------------------|------------------|------------------|

Answer Section Page 3

5 A B C D

6 A B C D

7 A B C D

8 A B C D

Try to answer any questions you did not reach in the time limit before checking your answers.

Checking your Answers

Check your answers against the correct answers at the bottom of this page. Look at any questions you got wrong and try to understand how to arrive at the correct answer. Keep in mind that most aptitude tests are designed to increase in difficulty and that people typically do not complete all the questions within the time limit. If you took much longer than 6 minutes to answer the questions, try to speed up your work rate. If you finished all of the questions within the time limit but made many mistakes, try focusing on the accuracy of your responses.

Improving your Numerical Abilities

Some tips for improving numerical abilities are provided below:

- When you read newspapers and reports, pay attention to numerical information.
- Complete calculations both with and without a calculator.
- Look for differences such as percentage changes in numerical trends.
- Check calculations done by others.
- Take on responsibilities which involve working with numbers.

Before the Session

- Follow the suggestions given in this preparation guide.
- Get a good night's sleep before the test session.
- Make sure you are wearing or bring with you glasses, contact lenses, hearing aids or anything else you may require for the session.
- If you have any special requirements, such as larger print versions of the test, specific lighting or seating needs, it is important that you make these known as soon as possible prior to the session to allow for appropriate accommodations to be made.

During the Test

- Try to stay calm; using the practice tips provided should help you feel more at ease.
- Follow the instructions carefully, and ask questions if you are not sure of anything before the test starts.
- Read each question carefully.
- Work as fast as you can. Do not spend too much time on any one question.
- If you find a question too difficult or are unsure of an answer indicate your best choice and move on quickly.
- After completing a test always seek feedback. It is much easier to improve your abilities if you know how well you have done.

Good luck in your test session. We wish you every success in your career.

Answer Section Page 2 Correct Answers

| | | | |
|--|--|--|--|
| A B C D | A B C D | A B C | A B C D |
| 1 <input type="radio"/> <input checked="" type="radio"/> <input type="radio"/> <input type="radio"/> | 2 <input type="radio"/> <input type="radio"/> <input type="radio"/> <input checked="" type="radio"/> | 3 <input checked="" type="radio"/> <input type="radio"/> <input type="radio"/> | 4 <input type="radio"/> <input type="radio"/> <input checked="" type="radio"/> <input type="radio"/> |

Answer Section Page 3 Correct Answers

| | | | |
|--|--|--|--|
| A B C D | A B C D | A B C D | A B C D |
| 5 <input type="radio"/> <input type="radio"/> <input type="radio"/> <input checked="" type="radio"/> | 6 <input checked="" type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> | 7 <input type="radio"/> <input type="radio"/> <input checked="" type="radio"/> <input type="radio"/> | 8 <input type="radio"/> <input type="radio"/> <input checked="" type="radio"/> <input type="radio"/> |