

Preparation Guide

Numerical Analysis

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

Why are Aptitude Assessments used?

Employers often use aptitude assessments 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.

Assessments 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

Assessments 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 which are similar to those you will be asked in the assessment. Completing these will help you understand the types of questions used and 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.

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.

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%
On-Line	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 On-Line, Mail Order and Telephone channels combined?

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

2 If On-Line 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 On-Line sales channel had the lowest proportion of transactions by repeat customers during the year.

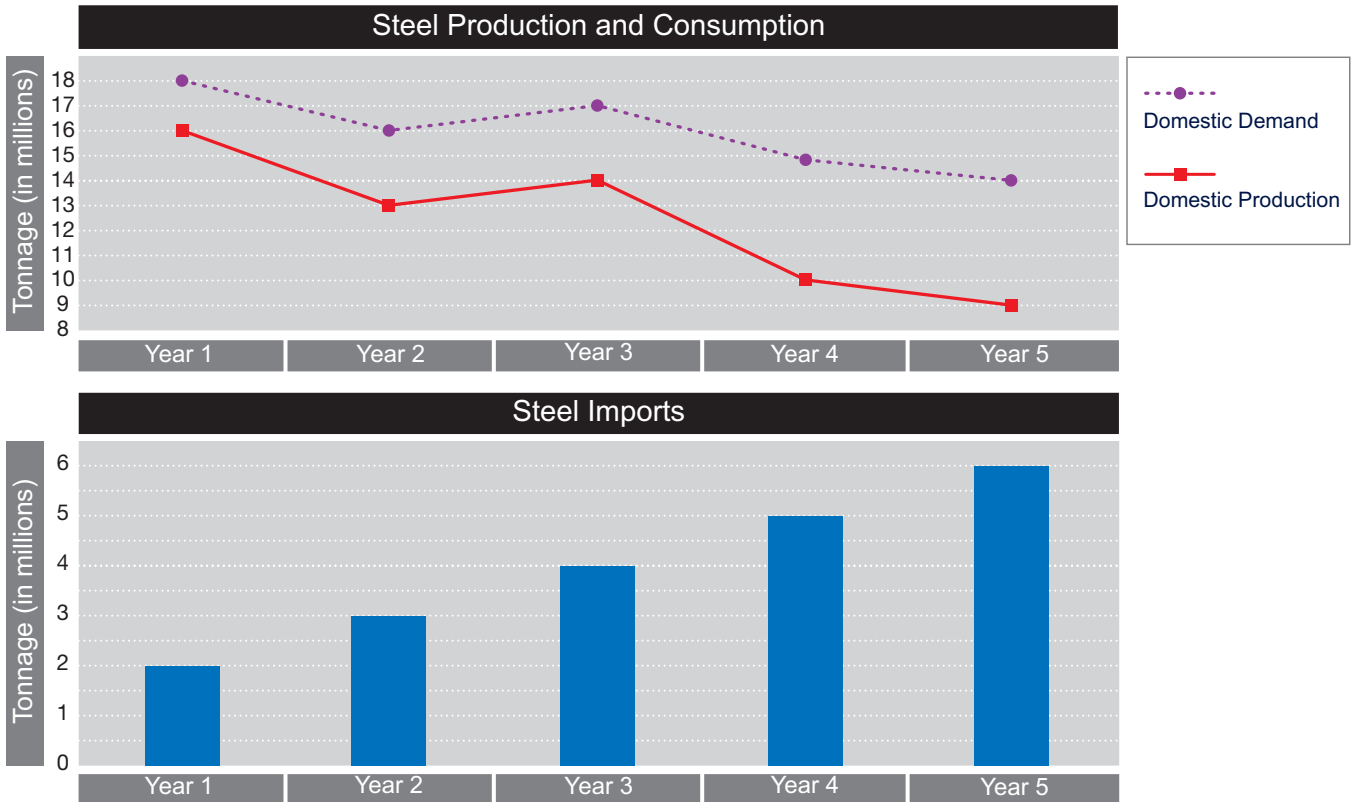
A True **B** False **C** Not possible to say

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 ability assessments are designed so that the questions gradually increase in difficulty and that people typically do not complete all of 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 more on the accuracy of your responses.

Improving your Numerical Abilities

Some tips for improving numerical abilities are provided below:

- Work with numerical data or materials.
- Revise basic arithmetic principles and equations.
- Complete calculations with and without a calculator.
- Look at tables, graphs and charts and interpret their meaning in words.
- ‘Eyeball’ data by looking for patterns and predicting future trends.
- Critically examine pieces of numerical information.
- Read financial reports in newspapers and journals.

Before the Session

- Follow the suggestions included in this preparation guide.
- Get a good night’s sleep before the assessment.
- Make sure you are wearing any glasses, contact lenses or hearing aids you may require.
- 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 immediately to allow appropriate accommodations to be made.

During the Assessment

- Try to stay calm. Using the practice tips above should help you feel more at ease.
- Follow the instructions carefully, and ask questions if you are not sure of anything before the assessment starts.
- Read each question carefully.
- Work as fast as you can. Do not take too much time over 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 an assessment always seek feedback. It is much easier to improve your abilities if you know how well you have done.

Good luck in your assessment 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"/>