

# Selection Tests

An employer may use a variety of assessment methods to determine an applicant's suitability for a position. Psychometric tests may be used in the selection process in addition to other assessment methods such as interviews, a range of assessment centre activities, presentations, and reference checking.

Psychometric assessment involves pencil and paper tests and/or computer-based applications, usually in the form of multiple choice questions. Assessments are generally grouped into tests of cognitive performance or tests of personality characteristics, but can also include interest inventories and motivations questionnaires.

## Cognitive Performance

Tests of cognitive performance aim to assess:

- aptitude for learning as well as using and understanding information
- general intellectual functioning
- ability to deal with certain types of information
- critical thinking/reasoning

Tests may focus on a particular area of cognitive performance including:

## Verbal Reasoning

These tests assess ability to understand and reason with written information and to perform reasoning tasks involving the use of language. The following examples are a sample of the range of questions that can be used to tap verbal reasoning:

### ▪ Select the word combination that best fits the blanks.

<b>Q.</b> The team was instructed that the correct procedure was to ..... their concerns to their team leader ..... and then this ..... would be passed on to the senior staff.			
<b>A.</b> highlight quietly process	<b>B.</b> convey initially information	<b>C.</b> communicate assertively problem	<b>D.</b> extrapolate individually data

<b>Q.</b> With the ..... in staff numbers following acceptance of voluntary early redundancies, ..... casual staff were recruited to assist during the ..... periods.			
<b>A.</b> increase more quiet	<b>B.</b> change different busy	<b>C.</b> reduction additional busy	<b>D.</b> alteration further quiet

### ▪ Identifying the order of a jumbled series.

<b>Q.</b> Which is the middle item in the series.				
<b>A.</b> sapling	<b>B.</b> tree	<b>C.</b> seed	<b>D.</b> seedling	<b>E.</b> old log

### ▪ Identifying relationships between concepts.

<b>Q.</b> Which word on the left holds a relationship with the two words on the right?	
toast fork cake butter spoon	knife / bread

### ▪ Recognising word associations.

<b>Q.</b> Look is to listen as see is to.... :				
<b>A.</b> feel	<b>B.</b> noise	<b>C.</b> sound	<b>D.</b> sense	<b>E.</b> hear

## Numerical Reasoning

These tests assess ability to perform reasoning tasks with numbers and understand numerical relationships. Revision of basic arithmetic calculations prior to testing may assist test performance. Calculators are rarely allowed during testing.

### ▪ Recognising numerical relationships.

Q. 5 is to 25 as 12 is to ... :

30      32      60      62      22

### ▪ Arithmetic

Q. A courier leaves his workplace at 10.00am to deliver goods 145km away. If he travels at 60km/hr, what time will he arrive at his destination?

Q. What is 20% of 64?

Q.  $32/40 \times 16/24 = ?$

Q. Divide 3276 by 24

Q. Multiply 0.4 by 0.9

### ▪ Number sequences

Q. Which number is missing from the following series?

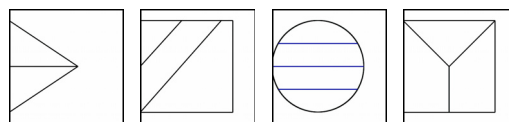
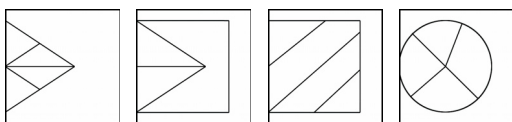
1 3 2 \_\_\_ 3 7 4 9 5

2 2 3 6 4 12 5 20 6 \_\_\_

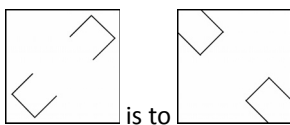
## Abstract Reasoning

These tests are used to identify general ability for occupations where clear thinking and problem solving are important. They are likely to involve identifying patterns between designs or other visual stimuli. Usually they are language free and do not require processing of verbal nor numerical information, so are not dependent on these skills. Tests of this type may not contain familiar information and do not usually tap knowledge acquired through education and so are not biased to academic levels of achievement.

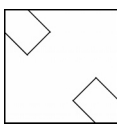
Q. Which pattern on the right belongs in the group on the left?



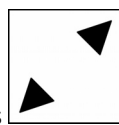
Q.



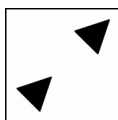
is to



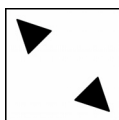
as



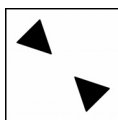
is to ... ?



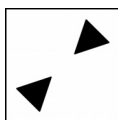
A



B

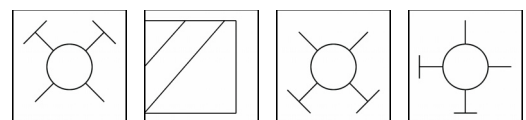
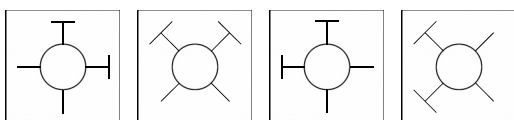


C



D

Q. Which pattern is the next in the series?



A

B

C

D

## Mechanical Reasoning

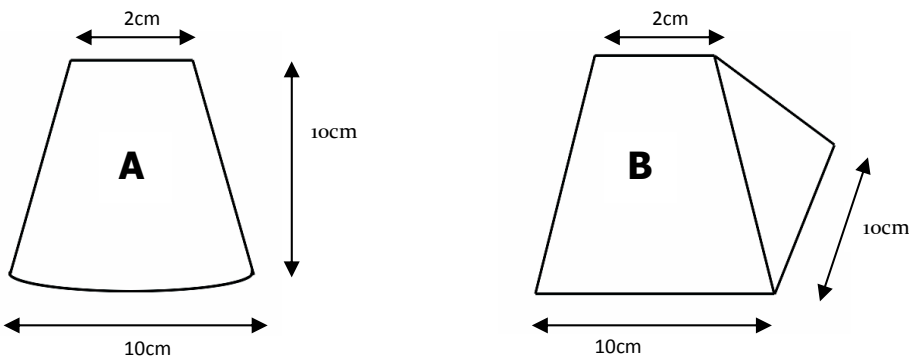
Tests of this type assess understanding of basic mechanical principles and the ability to perceive and understand relationships between components within a mechanism. If part of a battery of general aptitude tests, they tend not to rely on specific mechanical knowledge, training nor mechanical experience. Test items usually contain a diagram/picture to refer to such as a piece of machinery, pulley system etc.

Q. If a truck takes a corner too sharply, greater force would be felt on:

- A. the tyres closest to the curb      B. both back tyres      C. both front tyres      D. the tyres away from the curb

Q. Which weighs more?

- A. a  
B. b  
C. equal weight

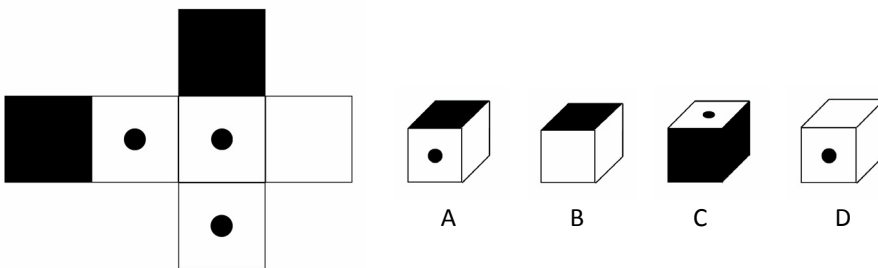


## Spatial Reasoning

Tests of spatial reasoning require mentally combining and manipulating shapes, objects and patterns. Tasks may involve transposing a picture or diagram (two-dimensions) into an object (three-dimensions), mentally rotating three-dimensional objects to another perspective, or identifying incompatible shapes in a series or group of shapes.

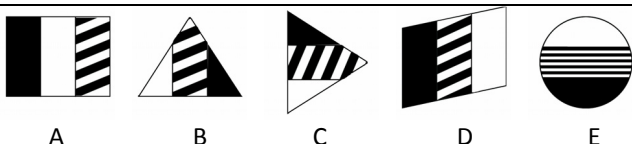
- **Transposing from two-dimensions into three dimensions.**

Q. Which shape can be made from the figure on the left?



- **Identifying an inconsistent shape in a series.**

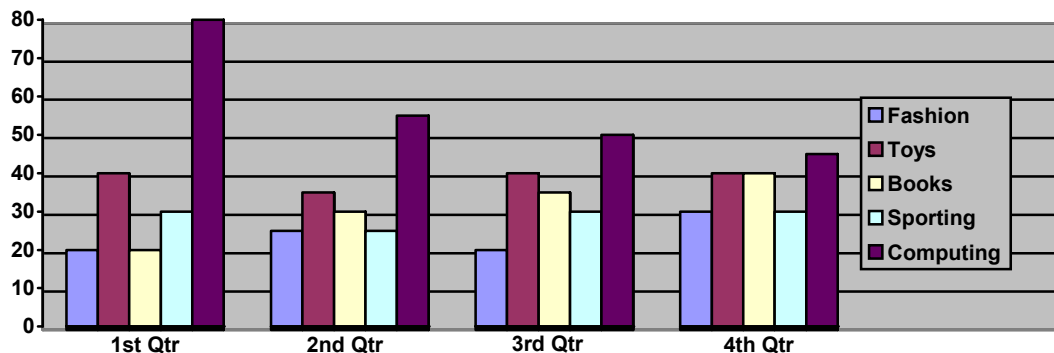
Q. Which shape does not belong in the group?



## Quantitative or Numerical Critical Reasoning

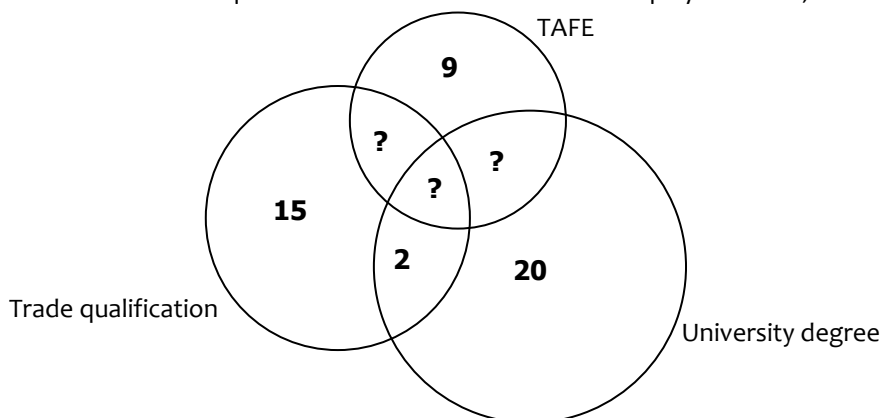
These measures assess the ability to understand and interpret numerical information presented in a number of different formats. Information may be presented in graphs, diagrams or tables and involve interpretation or calculation of numerical or statistical data. Calculators are sometimes allowed for these tests.

**Q.** Which area of retailing may demonstrate greater relative growth in the next quarter given percentage profit over the previous year?



**Q.** The training profile of staff in a medium-size company is represented below.

- (a) How many staff has a trade qualification with no other qualification?  
 (b) How many staff has a university degree but no TAFE qualifications?  
 (c) The total number of staff with two qualifications is 12. If 62 staff were employed overall, what number hold all three types of qualifications?



## Verbal Critical Reasoning

These tests assess the ability to evaluate the logic of various kinds of arguments. Tests assessing critical reasoning may be used for selection at managerial and executive levels. Skills assessed may include information seeking and discrimination of essential information, analysis and interpretation of material, determining validity of information, identifying biases in reasoning and organising work tasks through the application of logical principles. Information may be written or presented in graphs and tables.

Higher incidences of stress were reported within an organisation since more project tenders were won than had been expected, increasing workloads of many staff. The number of full-time staff also increased. The increase in staff numbers necessitated employment of an additional member to the HR team at assistant level. The HR team implemented a series of programs to assist staff manage their stress levels more effectively and to educate staff about lifestyle, health and anxiety issues in the workplace. It was expected that the new HR assistant would play a direct role in designing and conducting these workshops. An employee who had adult workplace training experience was selected as the new HR assistant.

Choose (a) if the statement is true or logical given the information in the passage.  
 Choose (b) if the statement is false or illogical given the information in the passage.  
 Choose (c) if you cannot answer without more information.

- Q.** An applicant with training skills and experience conducting stress management courses should get the job of HR assistant.  
 (a) (b) (c)
- Q.** HR assistants are responsible for running workshops to facilitate staff functions within the workplace.  
 (a) (b) (c)
- Q.** Increased workloads without a change in workplace support will lead to higher incidences of work-related stress cases.  
 (a) (b) (c)
- Q.** An effective way in which to prevent workplace stress in this instance would be:  
 .....

## Personality Inventories

These assessment instruments aim to assess how an individual prefers to behave in a work setting. These assess preferences, attitudes, personal qualities and preferred behavioural styles. Tests are based on the assumption that personality traits are stable over time and over situation.

- Questions are often broad and unspecific (“Do you prefer to plan your weekend or keep your options open?”)
- There are no right or wrong answers
- Personality questionnaires generally contain a large number of questions, although they are usually un-timed
- It is recommended that you respond quickly to each question without pondering too much over every question. Just rely on your first natural reaction to each question
- You will generally be asked to think of yourself in a work context when completing these questionnaires

There is not a typical personality profile that the employer will be seeking, meaning that they are not trying to find a ‘perfect’ candidate who matches their idea of the ideal person for the job. What they are interested in is the pattern of your responses which indicate your behavioural preferences. The profile produced from your responses may comment on factors such as work style (including conscientiousness and rule tendency to follow rules), your preferred communication style, what information you base decisions on, how you handle your emotions and what motivates you.

Commonly used tests of personality include the Sixteen Personality Factor Questionnaire (16PF), the Occupational Personality Questionnaire (OPQ), the California Psychological Inventory (CPI) and the NEO-PI-R, as well as a range of other measures designed for specific organisations.

<b>Q.</b> When presenting a new idea at work, I feel that other people’s ideas will be better than mine.
<b>(a)</b> often <b>(b)</b> sometimes <b>(c)</b> never

<b>Q.</b> I enjoy looking closely at detailed material and get very involved in the task at hand.
<b>(a)</b> often <b>(b)</b> sometimes <b>(c)</b> never

<b>Q.</b> If I am given a large and unfamiliar task to complete, I would prefer to:
<b>(a)</b> Start it straight away to ensure completion within set time-frames.
<b>(b)</b> Initially use time for planning and consideration of how to best tackle the task.
<b>(c)</b> Request the assistance of another colleague who is more familiar with the task.

<b>Q.</b> In a new work situation, I would prefer:
<b>(a)</b> To be introduced to work colleagues individually initially.
<b>(b)</b> To attend an informal morning-tea function so I could meet a number of new colleagues at the same time.

## Preparation for testing

- try to find out as much as you can about the testing session beforehand such as type of tests, if timed or un-timed, etc
- inform the prospective employer beforehand if you require any type of special provision or if you are on medication which may affect your test performance
- revise basic math calculations without a calculator such as addition, subtraction, multiplication, division, fractions, decimals and percentages prior to attending
- practise interpreting graphs, charts, data and reading reports
- practise word games, crossword and diagram puzzles, brain teasers etc.
- obtain practice tests if available from the organisation
- obtain books with sample tests items from libraries, bookshops and career centres
- if you have no experience in test taking, consider sitting a test through government recruiting agencies, banks and other large organisations in order to get some practice

(More tips over page)

## Before the test session

- prepare well by getting adequate sleep before the testing day and eating a good breakfast
- become familiar with the testing location prior to the day, including parking options
- arrive in plenty of time
- take any necessary aids such as glasses, throat lozenges etc

## At the test session

- take some slow deep breaths to calm yourself if you are nervous
- listen carefully to the instructions from the test administrator and ask questions if you are uncertain
- follow instructions exactly, including turning off your mobile phone
- read the questions very carefully
- complete any practice questions provided on the test and ask questions of the Test Administrator if necessary in order that you understand what you are being asked to do in the test
- determine the appropriate time allocation for each section and follow these time limits
- work through each test carefully, but do not spend too much time on any one question
- if you are stuck on a question, leave it and return to it at the end if time permits
- do not skip whole sections, but if you know that you definitely cannot answer a question, try to identify possible “distracter” answers and guess between more likely answers in multiple-choice items. (e.g. Eliminate answers a. and c. because they do not make sense and guess between possible correct answers of b. d. and e.). **It is certainly advisable to avoid ‘wild guessing’ on aptitude tests**
- if you finish the test early, always revise and check your answers

## After the test session

- Seek feedback on your results, regardless of whether or not you are offered or accept the role in question. This will help you to understand yourself better, to potentially develop your skills where possible, as well as inform you of how to best leverage your strengths in the future