

INCLUDES  
PERSONALITY  
QUESTIONNAIRES

# THE GRADUATE PSYCHOMETRIC TEST WORKBOOK

2nd edition

ADVANCED LEVEL

Essential preparation for quantitative  
reasoning, data interpretation and  
verbal reasoning tests



MIKE BRYON



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London and Philadelphia

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# Preface

I applied for several finance-related graduate jobs including the NHS Graduate Training Scheme and Big-4 accounting firms, and this was pretty much the only book I found whose level of difficulty reflected that of the actual tests, particularly the verbal reasoning section and the final part of the numerical reasoning section. The author provides detailed explanations for the answers which really helped me to improve my scores, and eventually pass.

Reader review

Many thousands of readers used the winning programme of self-study contained in the first edition of this book. This new edition offers even more – and more challenging – practice material. Companies expect good results from candidates in both numerical and verbal tests. This book offers over 500 practice questions organized as five realistic full-length tests and 20 mini tests. Use it as a key part of your programme of review for management and graduate psychometric tests. There are review personality questionnaires in Chapter 2 and graduate verbal reasoning tests in Chapter 3, and you can use the mini tests in Chapter 4 to master the key numerical competencies examined by most management and graduate numerical assessments. Get down to some serious score improving practice for data interpretation tests with the expanded and improved Chapter 5.

## *Preface*

Use the extensive answers and explanations in Chapter 6 and the interpretations of your scores in Chapter 7 to raise your game further still.

You will find thousands more practice questions in the following Kogan Page titles:

*How to Pass Graduate Psychometric Tests*, 3rd edition

*How to Pass Advanced Numeracy Tests*, Revised edition

*The Advanced Numeracy Test Workbook*, 2nd edition

*How to Pass Advanced Verbal Reasoning Tests*

*How to Pass Diagrammatic Reasoning Tests*

*How to Pass Data Interpretation Tests*

If you are having difficulty finding practice material relevant to the test you face then by all means email me at [help@mikebryon.com](mailto:help@mikebryon.com) with details of the test, and I will be glad to inform you of any sources I know of that may be helpful to you.

May I take this opportunity to wish you every success in your career and the best of luck in the psychometric assessment that you face.

# 1

## **Psychometric testing in context**

How you score in a psychometric test is largely dependent on how well you have prepared. In the current economic climate the vast majority of successful candidates will have practiced for weeks before the test. Everyone can improve on their score, but you may need to practice a lot if you want to show a significant improvement. If the position to which you apply is heavily oversubscribed then set about a major programme of practice. Other candidates will be doing this, so you will need to do the same or risk coming a poor second.

You will not be able to get hold of past papers or real copies of the test, and you will need far more material than the example questions provided by the organization or test publisher. To prepare properly you will require many hundreds, thousands even, of practice questions. These questions will have to be of the right type and at a suitable level of difficulty. Depending on your starting point, it may be best if you begin with intermediate titles and then progress to the more advanced. Understand that you have entered a competition used by the institution or employer to select the winning candidates.

Psychometric testing is widespread and many graduate or management positions or courses will require you to undergo some sort of psychometric assessment during the selection process. At the graduate level they are likely to be tests of your stamina and endurance as well as investigations of your interests, personality and abilities.



There are many types of assessment used at the graduate and management level. Some are specialist to a particular career or profession, others are general. The tests that you face are likely to be a combination of both specialist and general. A non-exhaustive list of types of tests from which your tests will be drawn includes:

- personality questionnaires;
- interest inventories;
- motivational questionnaires;
- stress questionnaires;
- policy analysis exercises;
- conflict management questionnaires;
- personal strengths questionnaires;
- leadership style questionnaires;
- values questionnaires;
- emotional intelligence questionnaires;
- entrepreneurial questionnaires;
- integrity tests;
- decision analysis;
- team role-play exercises;
- group exercises;
- UK university admissions tests (eg BMAT and UK Clinical admissions test for medicine);
- in-tray exercises;
- verbal, numerical/quantitative, diagrammatic or abstract analysis;
- interpreting data, written information or diagrams;
- verbal, numerical, diagrammatic or abstract reasoning;
- work sample tests;
- input type diagrammatic tests;
- tests of accuracy;
- fault diagnosis tests;
- mechanical and technical reasoning;

- abstract and spatial reasoning;
- observation tests;
- trainability tests;
- postgraduate programme admission tests (eg GMAT – an international test for business schools);
- professional training admission tests (eg Law);
- Occupational specific tests (eg for fire fighters, police, civil service).

A questionnaire will not normally have a time limit, while a test will be strictly time limited.

The vast majority of psychometric tests comprise a standardized series of problems or statements, usually multiple choice or short answer, increasingly taken at a computer terminal; otherwise with pen and paper. The conditions under which the test is taken will be standardized, and for many tests a strict time limit will apply. Tests are marked or scored and the results allow comparisons to be drawn between the candidates. At the graduate and managerial end of the testing spectrum they are likely to comprise a series of sub-tests taken one after the other over a number of hours with only a short pause between papers.

Before you sit a psychometric test or questionnaire you should find out as much as you possibly can about it. The internet is a great source for this kind of information but material should also be available as an information sheet or over the telephone. The organization that has invited you to a test should provide you with, or direct you to, this information.

It is really important that you avoid any feelings of resentment or a fear of failure as these feelings mean that you commit less than your full effort. Push negative thoughts aside and decide to treat it as an opportunity to demonstrate your true worth. If passing this test means that you can realize a life goal then you have no alternative but to try your best and attend fully prepared.

If you suffer a disability that will affect your ability to complete any aspect of the selection process then inform the organization immediately. In many instances you may be allowed extra time to complete the test or they may organize things differently in order to accommodate your needs.

## **How to make best use of this workbook**

This book is intended to help you practise for the three most common parts of graduate or management tests: the personality questionnaires, the numerical analysis sub-tests and the verbal analysis sub-tests (you will find other titles in the Kogan Page testing series with practice material for most of the other types of graduate test). It is intended as a companion to the best-selling title *How to Pass Graduate Psychometric Tests*, also written by me, and by working from both titles you will have over 1,000 questions on which to practise.

I have included material that will benefit most applicants; however, this may mean that not all the material is relevant to your situation. Seek the most appropriate material in terms of both the level of difficulty and question type. Skip material that you find too easy, or adjust the time allowed to make it more of a challenge. Alternatively, leave material you find hard until a later stage in your programme of practice.

To benefit most you need to undertake two sorts of practice. You should start work in a relaxed situation, with others if possible, without constraint of time, reviewing examples of questions, working out the answers and becoming familiar with the demands. Feel free to review the correct answers and explanations provided at any point during this stage of your programme. Refer to textbooks, dictionaries or a calculator as much as you wish.

Once you are familiar with the challenge you should start to practise under realistic test conditions. This involves putting aside the calculator or dictionary and working against the clock without help or interruption. The aim is to develop a good exam technique and to improve your stamina and endurance. Do not spend too long on questions and stop when you run out of time. After the test you should review the answers and explanations provided and go over your wrong answers to better understand where you made mistakes or to identify gaps in your knowledge that you can then set about resolving.

All the material in this book has been arranged as practice tests with recommended time limits. They are realistic in terms of the relevance of the questions and the sheer hard work and concentration that are

required of candidates for graduate and management psychometric tests. In the companion title *How to Pass Graduate Psychometric Tests* you will find a useful diagnostic exercise and glossary of terms as well as many hundreds of further practice questions.

## **Set yourself a personal challenge**

To get the most out of these practice tests, set yourself the personal challenge of trying to beat your last score each time you take a test. That way you will prove to yourself the value of practice and create a more realistic real test feel.

You need to try really hard and take the challenge seriously if you are to realize this aim.

Proceed by following this 11-step programme:

- Step 1. Undertake the familiarization work described above.
- Step 2. Take the first test, either analysis of information (test 2) or data interpretation (test 4).
- Step 3. Score that test and review your answers in light of the explanations provided.
- Step 4. Read the appropriate interpretation of your score.
- Step 5. Undertake more practice, making sure that you address any identified gaps in your knowledge or skills. Undertake the mini-tests in Chapter 4. Obtain this practice material from the companion title or other Kogan Page titles.
- Step 6. Set yourself the challenge of beating your first score.
- Step 7. Get yourself in the right frame of mind and really 'go for it' in the next practice test.
- Step 8. Score it and revise your answers and the interpretation of your second score.
- Step 9. Repeat step 5.
- Step 10. In the case of data interpretation, take test 6 and again try to get a new personal best score.
- Step 11. Calculate your percentage scores in order to make comparisons. Record your scores in the boxes below.

## **Analysis of information**

Percentage scores

Test 2



Test 3



Percentage improvement



## **Data interpretation**

Percentage scores

Test 4

Test 5

Test 6

Percentage improvement (between tests 4 and 6)

## **Try not to fear failure**

It is possible that more candidates will fail than pass a graduate psychometric test or questionnaire. This is especially the case if the position or place is heavily oversubscribed. Many of the candidates lucky enough to pass will have previously failed a test or even previously failed the same test. If you fail, it does not mean that you do not have the potential to do the job or pursue the career. In fact it says very little about you, so try not to take it personally. You may be perfectly able to do the job and indeed you might have passed the test if there had been fewer candidates or if you retook the test having benefited from the first experience.

Ask the organization to provide you with feedback and use this information to identify the areas in which you most need to improve. Recall and make a note of the type of questions and the level of difficulty. Plan a new programme of practice concentrating on the areas in which you did less well. Try again, this time much better informed of the challenge.

Failing should not prejudice any future applications that you make. There may be a rule that means you cannot reapply immediately or for a period afterwards. However, many successful candidates have only passed on their third or fourth attempt and go on to enjoy an unimpeded career within the organization of their choice.

# 2

## **Graduate personality questionnaire**

A personality questionnaire requires you to indicate how you respond to a variety of situations or statements. Such questionnaires comprise many tens of questions and you must indicate whether you agree or disagree with the sentiment expressed. Alternatively, they describe a situation and offer a number of possible responses; it is your task to decide which of the responses is the most appropriate.

The same issue is often explored with more than one question, each phrased differently and approaching the issue from a variety of perspectives (usually widely dispersed through the test). Test authors repeat issues to try to see if you are consistent in your response and they take inconstancy to mean that the applicant may be being disingenuous in their responses.

Most people answer these questionnaires far too quickly and fail to consider the questions sufficiently. The questionnaire is often sent out with the application pack or features early on in the recruitment process, perhaps on a website. If this is true in your case then realize that the questionnaire may be used to reject a large number of applicants. How you present yourself in the questionnaire will determine whether or not you are passed through to the next stage of the recruitment process. Rushing the questionnaire will mean that you fail to give the best impression possible and for many candidates rushing



will invite rejection simply because they have failed to take the questionnaire seriously.

Another common error is to answer the question outside of the context in which the question is asked. Constantly remind yourself of the context. You are applying for a particular role; they are trying to identify candidates with suitable personalities for a particular position and organization. Always answer the questions in this context. Avoid the all too common mistake of getting too philosophical about the issue or imagining a non-work situation when you might answer the question differently. See every question from the perspective of the employer. If the questionnaire asks 'Is honesty always the best policy?', realize that the employer is expecting a positive response despite the fact that you can imagine an unlikely and far-fetched scenario where dishonesty might be kinder or in the interest of the person to whom you are lying.

Be prepared to make a response or series of responses that you feel might not support your application. Honesty is the only policy. It is possible that a single 'wrong' response can lead to a rejected application; this can apply to issues that are considered essential to the role, but the vast majority of the questions that make up a questionnaire will not be so critical and every candidate will make a number of low-scoring responses. If the questionnaire asks 'Are you fluent in a second European language?' and you are not, then avoid any temptation to mislead. Questions of competency in particular are very likely to be picked up later in the process or, worse, could land you a job in which you cannot perform.

There is no conflict between giving honest responses and making sure that you present yourself as well as possible. Some features of your character might be judged by an employer as a good quality while another might be put off by those features. It is perfectly reasonable, therefore, that you should stress some parts of your personality over others, depending on your understanding of what the employer wants. All candidates seek to make their application as attractive as possible. Study the information sent to you by the employer, reread the advertisement, find out as much as you can about the culture and preferred working style of the organization. Keep this information in mind when deciding whether or not to agree or agree strongly with a statement. For example, if the advertisement states

that the organization is looking for someone who likes to get their teeth into a problem, and you respond well in such a culture, then emphasize that aspect of your personality when deciding your response to the statements contained in the questionnaire. Alternatively, use this information to realize that this is not the sort of establishment that you want to join and look elsewhere.

Try not to overdo the number of responses that suggest you find it difficult to decide; nor should you indicate too many responses as strongly held views.

There is not normally a time limit for the completion of personality questionnaires.

Over the page is a 130-question practice graduate personality questionnaire. Use it to reflect on typical styles of question posed in real tests. Practise being consistent in your answers. Remember that a negative response may be consistent with a previous positive response.

It is not possible to identify a correct response to these questions. How an organization might weight your responses would depend on the role for which you are applying and the organization's priorities and preferred working style. In the chapter 'Answers and many detailed explanations' I have provided an interpretation of the question and identified other questions to which a consistent response might be expected. These comments are intended only to help you develop an effective approach to these common tests. Do not draw from the comments any conclusions regarding your aptitude for any particular role or career. Simply use the questions to familiarize yourself with these very common tests, to realize how an employer is likely to interpret your responses and to help you to decide how to present your personal attributes in the best possible light.

## **Test 1: Graduate personality questionnaire**

### **Test instructions**

This test comprises 130 questions and there is no time limit.

Each question consists of a statement or describes a situation and offers a choice of responses. It is your task to decide your personal response. You should think carefully about the statement or situation and answer the questions honestly.

You should attempt all 130 questions and provide an answer to them all.

The answer you give will depend on your personal circumstances so it is not possible to give correct or incorrect answers. However, an interpretation of each statement is provided on pages 194–205 and other questions are listed which you should consider for consistency of your responses.

To get the most out of the practice test, decide on a position to which you might apply and have in mind a particular organization. Decide on a number of features of your personality that you feel would best represent you for that position and to that organization and try to emphasize those qualities in particular and above others in your responses.

During the test, reflect on the statements and situations carefully, keeping in mind the position to which you are applying and the preferred working style of the organization.

Use this test to practise becoming more consistent in your responses.

1. Sometimes you have to take stock and be sure that all the financial needs and objectives of the organization will be served before you press on with a new initiative.

A Agree strongly  
B Agree  
C Do not agree or disagree  
D Disagree  
E Disagree strongly

☐

Answer

2. I can rely on my own initiative.

A Agree strongly  
B Agree  
C Do not agree or disagree  
D Disagree  
E Disagree strongly

☐

Answer

3. Others would describe me as unflappable.

A Agree strongly  
B Agree  
C Do not agree or disagree  
D Disagree  
E Disagree strongly

☐

Answer

4. I like nothing more than getting my teeth into a challenge.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

5. It pays to plan for the worst case even if it is very unlikely to happen.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

6. Accuracy should not be sacrificed to speed.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

7. I would describe myself as people friendly.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

8. Keeping things simple makes for good business.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

9. I would describe myself as a long-term player.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

10. My career to date owes much to my exceptional people skills.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

11. Drive and determination alone will effect a positive solution to most challenges.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

12. In the real world, leadership is more about leading people through unforeseen challenges than being able to visualize, communicate and deploy strategies.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

13. I am an exceptional relationship builder.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

14. I have an exemplary written style.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

15. Whatever my role I am determined to make a difference.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

16. I never tire of new tools, technologies or ideas.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

17. I prefer realistic, down to earth solutions.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

18. I find intolerance inexcusable.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer



19. I like to have every eventuality covered.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

20. One of my strengths is data analysis.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

21. I set myself deadlines and I adhere to them.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

22. Others regard me as totally reliable and I really do hate letting others down.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

23. Key to my management approach is the ability to enthuse others.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

24. I would not hesitate to ring a colleague at the weekend to establish how an important issue was resolved.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

25. For an organization to stay competitive you have to constantly challenge the status quo.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

26. I will travel by bus, train, car or plane to see the deal done.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

27. I excel in a role that demands strategic awareness.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

28. Above all else, others would describe me as dependable.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

29. I am happiest working in a no-blame culture.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

30. I feel uncomfortable if I am anything less than autonomous.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

31. Always find the time to predict the next challenge even if it distracts you from the most immediate threat.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

32. A balanced sense of humour is an asset in any workplace.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

33. I am uncomfortable with ambiguity.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

34. Only if I am qualified in a subject area do I feel well placed to contribute to a debate.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

35. More than anything I want to influence.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

36. The devil is in the detail.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

37. I work best if I have an agreed set of performance indicators against which my contribution can be judged.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

38. I take great pride in my impartiality.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

39. I like responsibility.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

40. I am naturally averse to risk.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

41. I pride myself on demonstrating exemplary management skills.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

42. I believe passionately that an empowering approach to management gets the most out of a team.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

43. It is not my job to change a light bulb.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

44. Change is best achieved step by step.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

45. A problem anticipated is a problem halved.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

46. I pride myself on being able to pick up on the big issues very quickly.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

47. It is important to me that I stand out as an individual.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

48. An important part of my role at work is to provide counsel.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer



49. If you cannot provide inspiration then you risk failing to bring others fully along with you.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

50. I do not have time to look at them all but I like to be copied into every e-mail.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

51. Others describe me as an able communicator.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

52. A compromise is rarely good for business.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

53. I bring natural stature to a role.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

54. The only way to approach ambiguity is with a good dose of clarity of thought.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

55. I pride myself on being able to recognize an opportunity.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

56. My colleagues will confirm that I can be very persuasive.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

57. It is very important to me to be judged competent in my role.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

58. I want to see incredible earning power from day one.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

59. If people applied a bit more common sense then half the problems that occur at work would be avoided.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

60. I demand very high standards of work from myself and others.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

Answer

61. Integrity cannot be compromised.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

Answer

62. Loss prevention or reduction is more important than fee earning.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

Answer

63. I prefer to organize and prioritize my own work.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

Answer

64. In business you need fast reflexes.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

65. Being matter-of-fact is very positive.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

66. I am decisive within my area of knowledge.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

67. I get a great deal of job satisfaction as a result of being able to streamline processes.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

68. Regulation stifles invention and creativity.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

69. I make my contribution on the right-hand side of the balance sheet.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

70. Sometimes you have to tell people to stop talking and listen for a change.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

71. It is true that the higher the return the higher the risk.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

72. I relish a broad workload.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

73. Every business can benefit from a few regulations and written procedures.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

74. I am highly self-disciplined.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

75. My approach is simple – it involves identifying the source of the problem and generating solutions quickly.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

76. Being unbiased is very important to me.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

77. I work best when I am allowed to get on with the job and distractions are kept to a minimum.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer



78. A consistent approach at work is far better than one that relies on inspired bursts of energy.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

79. I would describe my current role as multitasked.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

80. Knowledge is power and is a commodity like any other so I prefer to keep it to myself.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

81. Work is about where I am going, not where I am from.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

82. My success is down to my strong interpersonal skills.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

83. I am highly focused on solving problems.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

84. When something goes wrong it is best to put it right and then report it.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

85. Others regard me as meticulous.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

86. At work it is best not to upset people by telling them something they do not want to hear.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

87. My drive and determination are the keys to my success.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

88. I am highly flexible in my approach.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

89. Like organic things, a business must be moved towards warmth and away from pain.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

90. Above all else, others would describe me as goal orientated.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

91. I absolutely refuse to be browbeaten.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

92. I despair that in this day and age of targets and measurement there is no credit given to all the outcomes that you can't put numbers on.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

93. I have a very direct approach.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

94. I have to be able to appreciate the bigger picture.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

95. I prefer to give orders rather than receive them.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

96. I must get involved in the detail if I am to manage others well.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

97. I am happy to muck in.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

98. When problems arrive I deal with them.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

99. I would describe myself as polished.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

100. Prudence is undervalued in many organizations.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

101. I have a genuine talent for establishing new leads.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

102. I pride myself on being able to do the job while dealing sensitively with people and issues.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

103. I have a proven aptitude for business development.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

104. There is no more rewarding challenge than rebuilding a ship plank by plank while remaining afloat.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

105. The only way to bring about change for the better is to drive it through personally, step by step.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

106. If a colleague did not find me dynamic then I would be failing in my role.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer



107. I operate a no-blame culture.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

108. You can never know it all and should always be prepared to adopt new ways of working.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

109. I understand the importance to staff morale of demonstrating effective listening skills.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

110. I excel in a client-facing role.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

111. I am 100 per cent customer focused; the rest can look after itself.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

112. I count as one of my achievements in life the fact that I have succeeded in raising funds for a new high-profile venture.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

113. I feel happiest when I can implement defined regulatory processes.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

114. My colleagues would describe me as entirely open to new ways of working.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

115. I can bring considerable experience of the field to my next position.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

116. I am only too happy to share knowledge with my colleagues.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

117. I want to be a star and I am prepared to work incredibly hard in order to be one.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

118. Eventually, common sense prevails.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

119. It is everyone's right to make mistakes. I only ask of them that they tell me about it straight away.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

120. Success does not come to you; you go to it with self-confidence and a strong need for control and independence.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

121. Only gregarious people can succeed in my field.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

122. I am naturally diplomatic.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

123. To take exception is rarely good for business; this does not mean that you have to accept everything, just that there are other ways of getting things sorted.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

124. I have done it before and I am still hungry enough to do it all over again.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

125. There is a bit of me that demands I must be better than the rest.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

126. If you can get people to buy into a set of objectives or targets then everyone will work that bit harder towards a shared goal.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

127. If I can get through the door then I can close the deal.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

128. Being personable can make up for many potential shortfalls.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

129. Success demands a high degree of boldness.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

130. I would describe myself as reasonable, competent, measured and considered.

- A Agree strongly
- B Agree
- C Do not agree or disagree
- D Disagree
- E Disagree strongly

☐

Answer

End of the questionnaire



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# 3

## Analysis of information

This chapter contains 133 questions organized between two practice tests. You are presented with a series of short passages each followed by three or sometimes four statements or questions. Your task is to indicate whether the statement or question is true, false or you cannot tell.

You answer these questions with reference only to the content of the passage and what can be inferred from it. With this type of question you sometimes find yourself saying something is true or false that you know not to be the case or confirming as true or false something with which you do not personally agree. This is because you rely only on the content of the passage to answer the questions. Be especially careful if you know lots about the subject covered by a passage as you are then more likely to involve your personal knowledge or opinions and as a result risk getting the question wrong!

In the real tests you have very little time to read the passage and answer the questions. Do not make the mistake of not practising if you find these questions easy when you are free of the pressure of time. In the real test you will only have time for one careful reading. You will have to switch really fast between vastly different subject matter with each passage and keep up a very high level of concentration right to the end. This all takes practice to get really good at.

This question type has become very popular in recent years and features in many graduate and management psychometric tests. With practice you can show a considerable improvement in your score.

Your studies will have already served as good preparation for this type of question, so these practice tests include some that are difficult. To help you develop your exam technique more time has been allowed for the first test.

Answers and explanations are provided on pages 205–220.

An interpretation of your score is provided on pages 246–248.

## **Test 2: Analysis of information**

### **Test instructions**

This test comprises 22 passages and 67 questions.

You are allowed 55 minutes to complete it (that is approximately 50 seconds a question).

You are given a series of passages each of which is followed by a number of statements. It is your task to say whether the statement is true or false or whether it is not possible to say whether the statement is true or false. You should base your decision only on the information or opinions given in the passage.

You should judge the statement to be true only if, for example, it follows logically from the passage or is a rewording of something contained in the passage or is a valid summary of the passage or a part of it.

You should judge the statement to be false if, for example, it cannot follow logically from the passage or if it contradicts something contained in the passage.

If you require more information than is contained in the passage before you can tell if the statement is true or false then you should record your answer as 'cannot tell'.

You should work quickly and not spend too long on any one question.

Work without interruption.

Do not turn over the page until you are ready to begin.

## **Passage 1**

Oil price instability justifies greater efforts to develop substitute fuels. But this should be a part of a two-pronged strategy, the other prong being to make existing fuels go further. Regrettably, however, the effort is still not there. Heat loss in homes and factories represents a substantial and avoidable waste. In transport, petrol is used relatively efficiently but it could be used to go even further still.

1. Not enough is being done to make better use of fuels.

A True  
B False  
C Cannot tell

☐

Answer

2. The opportunity to make existing fuels go further exists mainly in the domestic sector.

A True  
B False  
C Cannot tell

☐

Answer

3. Oil price instability will lead to greater efforts to use existing fuel sources more efficiently.

A True  
B False  
C Cannot tell

☐

Answer

## Passage 2

The New Homes Group delivered its half-year results with profits up by 50% and turnover and average selling price all strongly ahead. This was a record performance for the group and relates to a period when the housing market was rising sharply. Since then the market has dipped following a succession of interest rate rises and a drop in consumer confidence.

4. The next half-year results may not be so impressive.

A True  
B False  
C Cannot tell

☐

Answer

5. During this period New Homes were selling properties at 50% higher prices.

A True  
B False  
C Cannot tell

☐

Answer

6. House buyers remain just as optimistic.

A True  
B False  
C Cannot tell

☐

Answer

### **Passage 3**

It is estimated that one in four children aged between 4 and 11 contract head lice each year. Children in urban schools are particularly prone. Girls and boys are infected by a ratio of three to one. This is related to the fact that girls' play tends to involve more prolonged contact between heads. Head lice live close to the scalp and feed on blood. The itch they cause is from the bite made when they are feeding. A louse lives for about 300 days and a female will lay over 2,000 eggs in her lifetime.

7. Boys aged between 4 and 11 years who go to urban schools are more likely to contract head lice than girls.

A True  
B False  
C Cannot tell

☐

Answer

8. The length of hair and the frequency with which it is washed are irrelevant to the likelihood of contracting head lice.

A True  
B False  
C Cannot tell

☐

Answer

9. A child can contract head lice when prolonged contact between heads occurs.

A True  
B False  
C Cannot tell

☐

Answer

## Passage 4

Life has been short for the one- and two-cent euro coins launched only three years ago. Faced with chronic shortages, the central banks of Denmark and Belgium have decided they have no alternative but to withdraw them and order retailers to round prices up or down to the nearest five cents, depending which is closest. The French have no such plans; they fear that the rounding of prices might lead to an overall increase in price levels.

10. If there were not such a chronic shortage of the coins the Danish and Belgian central banks would not be withdrawing them.

A True  
B False  
C Cannot tell

☐

Answer

11. The shortage of these coins in France is less chronic.

A True  
B False  
C Cannot tell

☐

Answer

12. The five-cent coin will shortly be the lowest-value euro coin in circulation.

A True  
B False  
C Cannot tell

☐

Answer



## **Passage 5**

For a decade the objective has been the ending of rough sleeping in Britain. New York's tough homelessness policies were adopted and they have been far more effective in London than in New York. Rough sleeping is becoming much rarer in London, while the number of homeless in New York remains high. There are several reasons. The benefits system in the UK is fairly generous when compared to the US system. The hostel accommodation in London has been greatly improved, with dormitories converted to single rooms, making the alternatives to living on the street more attractive than in New York.

13. Improvements to hostel accommodation have made this alternative to rough sleeping more attractive in London than in New York.

A True  
B False  
C Cannot tell

☐

Answer

14. Homelessness in Britain has declined.

A True  
B False  
C Cannot tell

☐

Answer

15. A justification for a comparison of the occurrence of homelessness between the two cities is made in the passage.

A True  
B False  
C Cannot tell

☐

Answer

## Passage 6

Traffic levels have fallen by 15% and congestion is down by a third. In August the Mayor of London announced a plan to extend the £5 charge for driving in central London during the working week westwards to Kensington and Chelsea. This was despite a consultative process in which almost 70,000 people and the vast majority of respondents said they did not want the scheme extended. However, the problem with the proposed extension is not only political. Extending the zone to a thickly populated area of London will mean that many people will qualify for the residents' discount, allowing them to drive to the city without paying any extra. Extending the scheme therefore may mean that total revenues drop from the current £90 million a year.

16. The extended scheme may face continued public opposition.

- A True
- B False
- C Cannot tell

☐

Answer

17. Kensington and Chelsea have high residential populations.

- A True
- B False
- C Cannot tell

☐

Answer

18. People who live in Kensington currently do not have to pay £5 to drive to the city.

- A True
- B False
- C Cannot tell

☐

Answer

19. Whilst the majority of respondents voted against the extension it is possible that they welcomed the fall in traffic levels and lower congestion.

- A True
- B False
- C Cannot tell

☐

Answer

## **Passage 7**

The cost of stamp duty for the average house purchase has more than doubled since 1997. In some towns the bills have risen by more than £10,000. Four successive rises in the tax on house purchases and the introduction of incremental bands, with the highest a 4% band for homes valued over £500,000, have sharply increased the amount raised by the Treasury. A spokesperson for the Treasury said that stamp duty remains a very small proportion of overall housing costs and property transaction costs are far lower in the UK than the rest of the EU and United States.

20. Taxation on property transactions in the UK has been increased four times.

- A True
- B False
- C Cannot tell

☐

Answer

21. In some towns the cost of stamp duty on a house purchased in 1997 was less than £5,000.

- A True
- B False
- C Cannot tell

☐

Answer

22. A house sold for half a million pounds incurs a £20,000 stamp duty bill.

- A True
- B False
- C Cannot tell

☐

Answer

## Passage 8

A swarm of locusts is a disaster and last month hundreds of swarms were reported in Senegal, Mali, Niger and Chad and vast areas of crops have been destroyed. A locust eats its own weight (2 grams) every day and a swarm contains billions of insects. The swarm can travel 60 miles a day and leave behind it a wasteland stripped of everything green and sown with eggs which hatch after 30 days. The last big locust plague in 1987–88 cost \$300 million to stop and the countries affected this year are too poor to cope, so the United Nations has appealed for donors and released \$15 million to assist eradication programmes. The most effective method is to spray pesticide from the air or from vehicles. Environmentally friendly methods are more costly and far less effective.

23. The current plague of locusts will cost more than \$300 million to stop.

- A True
- B False
- C Cannot tell

☐

Answer

24. The passage states that donors have been asked to provide \$15 million in assistance.

- A True
- B False
- C Cannot tell

☐

Answer

25. The next generation of locusts is due to hatch.

- A True
- B False
- C Cannot tell

☐

Answer

## **Passage 9**

Spanish-speaking Americans (Latinos) have overtaken African-Americans as the largest ethnic minority in the United States. The Latino population is growing at over 3% a year, compared with 0.6% for the rest of the population. They are getting richer, accounting for 8% of America's GDP, and are expected to account for 10% of the GDP by 2010. The Latino population is highly concentrated geographically, with two-thirds living in seven states, and they are the youngest population group. Some 75% are of Mexican origin and they want to keep their Mexican culture as well as adopt American values.

26. The passage's opening statement lacks a factual base.

- A True
- B False
- C Cannot tell

☐

Answer

27. It can be inferred from the passage that the Spanish language is the most widely spoken minority language in the United States.

- A True
- B False
- C Cannot tell

☐

Answer

28. The Latino population will comprise 1 in 10 of the American population by 2010.

- A True
- B False
- C Cannot tell

☐

Answer

## Passage 10

Singapore was the first Asian economy to boom and it is booming once again. In the second quarter of this year its economy was 12.5% higher than in the same period the previous year and its government is forecasting future growth at 9% per annum. Some of this growth is due to the passing of the SARS crisis but most was down to a 50% increase in pharmaceutical exports. Most of the world's leading firms now make products in Singapore and its government plans to generate 12 billion a year from this sector by 2010. If this happens, Singapore will avoid recession as jobs in electronics move to China and other low-cost Asian economies.

29. Singapore's first boom was founded on the export of electronics.

- A True
- B False
- C Cannot tell

☐

Answer

30. This impressive growth is due to an incredible increase in pharmaceutical exports.

- A True
- B False
- C Cannot tell

☐

Answer

31. Singapore's economy has grown 12.5% in a year.

- A True
- B False
- C Cannot tell

☐

Answer

## **Passage 11**

The world's population is growing by about 70 million people a year but the increase is uneven, with some nations' populations growing rapidly and others decreasing. Among the industrialized nations, only the United States will experience significant growth by 2050, while Europe is expected to have 60 million fewer people than today. Britain is predicted to grow faster than any other European industrialized country, reaching a population of 65 million in the next 25 years. By then it will have overtaken France to become Europe's second most populous country.

32. In all but one case the nations due to experience significant growth in their populations are not industrial.

- A True
- B False
- C Cannot tell

☐

Answer

33. Britain is not expected to experience significant population growth by 2050.

- A True
- B False
- C Cannot tell

☐

Answer

34. Britain is currently the third most populous European country.

- A True
- B False
- C Cannot tell

☐

Answer

## Passage 12

The radio audience measurement society is considering whether its quarterly figures for audience numbers should be released earlier to all radio companies but it is concerned to avoid share-price-sensitive information being leaked to the markets. The current situation involves the commercial stations receiving the results 12 hours later than the public channels. A number of commercial stations have questioned this practice, arguing that they too would like to receive the information earlier so that they could prepare press releases before the markets open. The issue has become significant because the commercial stations' share prices tend to move sharply in the hours before the figures are released.

35. An alternative proposal would involve neither type of organization receiving the information early.

- A True
- B False
- C Cannot tell

☐

Answer

36. The commercial stations' share price will go down if the figures show a fall in audience numbers.

- A True
- B False
- C Cannot tell

☐

Answer



37. The passage author fails to present a case for the status quo.

- A True
- B False
- C Cannot tell

☐

Answer

## **Passage 13**

Fifty millimetres of rain across one square kilometre adds up to 50,000 tonnes of water. Such downpours are not rare and on their own they need not cause any significant problem. But if they occur in the wrong place they can cause flash floods, which can be devastating, especially in steep-sided valleys where the torrent can move at tremendous speeds and build up massive momentum. When moving down a steep valley, 15 centimetres of water will sweep a person off their feet; half a metre of water will carry away a car. If water builds up behind debris it can suddenly burst through, creating a wall of water metres high and travelling at speeds up to 45 kilometres per hour.

38. Flash floods occur when heavy rain falls over particular geographic features.

- A True
- B False
- C Cannot tell

☐

Answer

39. A downpour of 15 centimetres of rain is rare.

- A True
- B False
- C Cannot tell

☐

Answer

40. Where a flash flood might occur would be very difficult or impossible even to predict.

- A True
- B False
- C Cannot tell

☐

Answer

## Passage 14

Demand for mobile phones in underdeveloped markets such as China and India is leading to ever-higher predictions for global sales. This year analysts have raised their forecasts for the third time to 640 million handsets. This is almost 100 million higher than forecast at the beginning of the year. Some are already forecasting that over 700 million handsets will be sold next year, with analysts convinced that record demand will continue in both developing and mature markets. Only five years ago, total sales were at a global level of 200 million.

41. Next year's predicted record sales are attributed to continued growth in newer markets.

- A True
- B False
- C Cannot tell

☐

Answer

42. Forecast global sales stand 500 million handsets higher than actual sales five years ago.

- A True
- B False
- C Cannot tell

☐

Answer

43. The most recent increase in this year's forecast for sales was almost 100 million handsets higher than the previous forecast.

- A True
- B False
- C Cannot tell

☐

Answer

## **Passage 15**

Scientists have ambitious plans to use cloning technology to save India's lion population from extinction. They believe that biotechnological intervention is a viable modern way to save threatened species. But conservationists argue that the high cost of such experiments would be better spent on protecting animals in their natural habitat. They argue that forests are still being lost to land clearance and India does not have enough wild space left in which the lions can live and hunt.

44. There are many sceptics of the scientists' plans.

- A True
- B False
- C Cannot tell

☐

Answer

45. The passage fails to present the counter-argument.

- A True
- B False
- C Cannot tell

☐

Answer

46. The passage states that the application of biotechnological interventions may have a role in a programme to save the Indian lion from extinction.

A True  
B False  
C Cannot tell

☐

Answer

## Passage 16

A company planning to outsource administrative jobs and its customers' details is being challenged. One of its customers has asked the government-appointed information commissioner to rule on whether or not his personnel files can be legally transferred. The customer believes that the move breaks the Data Protection Act and European legislation that does not allow personal details to be sent outside the European Union without the individual's written consent. If the challenge is successful, the company fears that it may have to abandon its offshore policy.

47. The company plans to transfer personal details and jobs to a company outside of the European Union.

A True  
B False  
C Cannot tell

☐

Answer

48. There is a conflict between the outsourcing of jobs to non-EU countries and national and European legislation.

A True  
B False  
C Cannot tell

☐

Answer

49. If the legal challenge were to succeed, an alternative to abandoning the policy might be to obtain the written consent of all the company's customers to the transfer.

- A True
- B False
- C Cannot tell

☐

Answer

## **Passage 17**

Twenty-four billion is invested in premium bonds and in the past 10 years the number of bonds in the draw has increased sevenfold. The chances of winning have recently changed from 27,500 to one to 24,000 to one. Record sales have meant that a new machine to select winning numbers randomly was required. The predecessor took five and a half hours to complete the draw, while the new machine can complete the task in half that time. Each month there are 1 million winners.

50. The chances of winning a prize have increased and there are now more winners' numbers.

- A True
- B False
- C Cannot tell

☐

Answer

51. The new machine takes 150 minutes to draw the 1 million winning numbers.

- A True
- B False
- C Cannot tell

☐

Answer

52. The new machine is a computer.

- A True
- B False
- C Cannot tell

☐

Answer

## Passage 18

The government wants 50 per cent of people aged 18 to 30 to go to university, and many of these new students are expected to study for shorter foundation degrees. These last two years and combine study with hands-on experience while in paid relevant work. Already more than 20,000 people are taking foundation degrees in 1,000 different courses. Self-discipline and strong motivation are critical if the student is to succeed because most foundation degrees are by distance learning and are part-time. While foundation degrees are not for the faint-hearted, they may appeal to many students who currently follow conventional university courses and who leave university with average debts of £30,000 and then have to compete for a graduate-level job against other foundation degree graduates with work-related experience.

53. It can be inferred from the passage that part-time study by distant learning demands a higher level of self-discipline than shown by students on conventional degree courses.

- A True
- B False
- C Cannot tell

☐

Answer

54. To undertake a foundation degree does not require one to go to university.

- A True
- B False
- C Cannot tell

☐

Answer

55. The case made for doing a foundation degree rather than a conventional degree is purely economic.

- A True
- B False
- C Cannot tell

☐

Answer

## **Passage 19**

Manufacturing around the globe is being hit by strong increases in the cost of commodities. In some industries, such as the automotive sector, it is common that contracts require annual price reductions. This means that manufacturers in these sectors are unable to pass on price increases. In other sectors there seems to be a general acceptance that prices are having to go up. Manufacturers in some parts of the world also face pressure from emission trading and climate change legislation.

56. You can infer from the passage that some automotive manufacturers will have to cease trading.

- A True
- B False
- C Cannot tell

☐

Answer

57. You would expect the immediate effect of this price pressure to be the erosion of margins.

- A True
- B False
- C Cannot tell

☐

Answer

58. The passage implies that commodity price inflation is the most serious threat to manufacturers.

- A True
- B False
- C Cannot tell

☐

Answer

## Passage 20

Labour worldwide is far less mobile than capital. However, this does not mean that governments can ignore the needs of enterprise or investors. A hundred years ago, mass migration across the Atlantic fuelled the growth of the American economy. Migrants took factory jobs at lower wages. In this day and age, factories are more likely to migrate than workers, mainly because of national barriers against immigration. In such a globalized world, governments must ensure that their economies remain internationally competitive.

59. Labour is less mobile than a century ago.

- A True
- B False
- C Cannot tell

☐

Answer



60. Barriers against immigration mean that governments must ensure that their economies remain internationally competitive.

- A True
- B False
- C Cannot tell

☐

Answer

61. The passage suggests that the world would be less globalized if labour were free to move.

- A True
- B False
- C Cannot tell

☐

Answer

## **Passage 21**

Government, politicians and the media perpetuate prejudice and inequality by repeating the lie that teenage mothers place irresponsible burdens on the state. Public service employers should question their approach to teenage women and accept that they have as much right to make choices about pregnancy and motherhood as everyone else. Society should confront the causes of teenage pregnancy, such as inadequate education and employment opportunities, not the women themselves. Teenage mothers need our support and at least equal treatment, and recognition that a young mother is not necessarily a bad mother.

62. Portraying teenage mothers as social problems is discriminatory.

- A True
- B False
- C Cannot tell

☐

Answer

63. The passage describes negative stereotypes of young mothers as prevalent.

- A True
- B False
- C Cannot tell

☐

Answer

64. The media-sanctioned view of young mothers includes the claim that they are incapable of being good parents.

- A True
- B False
- C Cannot tell

☐

Answer

## Passage 22

People with hypertension have a 60% greater risk of a heart attack when the temperature is more than five degrees cooler than the previous day's temperature. As well as increasing blood pressure, cold weather can cause blood to thicken and make a clot more likely. Cholesterol levels also increase during cold weather and infections of the respiratory tract are far more common and contribute further to the risk of a heart attack. Hypertension is believed to affect 40% of adults in Northern Europe and very often goes unnoticed until serious damage to a sufferer's health has occurred.

65. Hypertension can cause the blood to thicken and clot during a spell of cold weather.

- A True
- B False
- C Cannot tell

☐

Answer

66. The passage describes the very unlikely situation whereby 40% of adults have a 60% risk of a heart attack when the temperature drops from one day to the next by more than five degrees.

- A True
- B False
- C Cannot tell

☐

Answer

67. More hypertension sufferers have heart attacks during the winter months.

- A True
- B False
- C Cannot tell

☐

Answer

End of test

## **Test 3: Analysis of information**

### **Test instructions**

This test comprises 22 passages and 66 questions.

You are allowed 44 minutes to complete it (almost 40 seconds a question).

You are given a series of passages, each of which is followed by a number of statements. It is your task to say whether the statement is true or false or whether it is not possible to say if the statement is true or false. You should base your decision only on the information or opinions given in the passage.

You should judge the statement to be true only if, for example, it follows logically from the passage or is a rewording of something contained in the passage or is a valid summary of the passage or a part of it.

You should judge the statement to be false if, for example, it cannot follow logically from the passage or if it contradicts something contained in the passage.

If you require more information than is contained in the passage before you can tell if the statement is true or false then you should record your answer as 'cannot tell'.

You should work quickly and not spend too long on any one question.

Work without interruption.

Do not turn over the page until you are ready to begin.

## **Passage 1**

EU national airlines will not make any money on their short-haul European operations this year despite heavy promotions of reduced fares and a campaign to cut costs. Most of these so-called flag carriers have reluctantly decided to pass on soaring fuel costs to short-haul passengers in the form of a surcharge on tickets. At the same time, they are encountering strong competition on most European routes from the budget carriers, who have pledged not to levy surcharges. Budget airlines have dramatically raised their short-haul market share, taking advantage of the financial difficulties at flag carriers. Short-haul accounts for almost one-fourth of the national carriers' business while the remainder is derived from long-haul flights, demand for which has experienced a strong recovery.

1. National airlines have imposed fuel surcharges on long-haul passengers too.

A True  
B False  
C Cannot tell

☐

Answer

2. The cost of flying on European routes has fallen.

A True  
B False  
C Cannot tell

☐

Answer

3. Losses on short-haul flights are adding to the financial difficulties experienced by national airlines.

A True  
B False  
C Cannot tell

☐

Answer

## Passage 2

Crude oil stocks are closely monitored by traders to establish the markets' natural supply and demand levels. Hoarding was a major factor in the high crude prices in the 1970s and evidence is again suggesting that hoarding is fuelling current record high crude prices. Crude stocks had fallen because refiners had adopted just-in-time stock management policies. However, traders have noticed that some countries are purchasing oil at levels well above their rate of consumption, suggesting that the hoarding of oil stocks is once again occurring. Traders have recently increased the world's crude markets' assumed levels of demand quite substantially because of increased consumption by developing nations such as India and China.

4. No facts are offered in support of the thesis that current high crude prices are being supported by the hoarding of stock.

A True  
B False  
C Cannot tell

☐

Answer

5. If hoarding is supporting high crude prices then one would expect prices to fall back once hoards have been established.

A True  
B False  
C Cannot tell

☐

Answer

6. India and China have recently become major oil importers.

A True  
B False  
C Cannot tell

☐

Answer

### **Passage 3**

You cannot be very intelligent if you do not know how smart you are until you have been told your IQ rate. It is probably unwise to take an IQ test because if you do then you risk feeling either superior or disappointed when you get the result, and neither of these sentiments is beneficial. What difference would it make to your life anyway, if you were to find out that you have the IQ of a genius or well below average? These considerations did not stop almost half a million Europeans from taking part in an internet IQ test. In the test, men scored 110 while women scored 105; left-handed people scored much higher than right-handed people; and people with brown eyes scored best while people with red hair scored the least.

7. The results suggest that men are more intelligent than women.

- A True
- B False
- C Cannot tell

☐

Answer

8. It is reasonable to surmise that the author would have difficulty understanding why someone would want to know their IQ.

- A True
- B False
- C Cannot tell

☐

Answer

9. The passage is written in a satirical style.

- A True
- B False
- C Cannot tell

☐

Answer

## Passage 4

Hybrid cars use half as much fuel as their petrol-only equivalents; a petrol engine is used to drive the wheels and to charge a large battery that powers an electric motor and in turn also drives the wheels. Hybrids cost around \$3,500 more than an equivalent petrol car. This high price makes the economics questionable for owners who average 12,000 miles a year as it would mean a 12-year payback; nevertheless, hybrid sales are strong in the United States.

In Europe, hybrid car sales have increased much more slowly. This is due in part to fuel taxes being much higher. The other factor is that European drivers have the option of buying diesel-engine-powered cars, which are almost as fuel efficient as hybrid cars. This possibility is denied to Americans because strict limits on particle emissions mean that diesel engines are effectively banned.

10. The diesel engine is as environmentally advantageous as the hybrid.

- A True
- B False
- C Cannot tell

☐

Answer

11. An economic case for buying a hybrid car might be made in the United States but not in Europe.

- A True
- B False
- C Cannot tell

☐

Answer



12. If the price of fuel at the filling stations were to fall, any economic case for hybrids would improve.

- A True
- B False
- C Cannot tell

☐

Answer

## **Passage 5**

Plastic bags litter our streets, kill wildlife, block drains and remain in the environment for decades. Plastic bags account for less than 1% of the household waste sent to landfill sites. Eighty per cent are recycled at least once as bin liners or are put to some other reuse. They are more energy efficient than alternatives such as paper or cardboard. If they are incinerated in energy from waste plants then some of the energy used in their manufacture can be recovered.

13. Plastic bags have a high reuse rate for a disposable item.

- A True
- B False
- C Cannot tell

☐

Answer

14. Plastic bags are a hygienic and convenient way of carrying things.

- A True
- B False
- C Cannot tell

☐

Answer

15. On balance the passage can be judged as coming down in favour of a case for the banning or taxing of plastic bags.

A True  
B False  
C Cannot tell

☐

Answer

## Passage 6

For 20 consecutive years the pass rate in the national advanced-level exams has increased. The exam questions have not become easier but the students find it easier to obtain top grades now that marks are awarded for course and project work and only 20% of the marks are reserved for the final exams. Last year 130,000 girls obtained two A grades whereas 20 years ago only 34,000 obtained these marks. Before 1987, grades were norm-rated against previous years, with only the top 10% of candidates being awarded an A grade. Since that date no limit to the number of A grades has been set and anyone who scores over 60% receives an A grade. This change has seen the number of A grades awarded more than double.

16. The examining method has made it easier for students to obtain top grades.

A True  
B False  
C Cannot tell

☐

Answer

17. Girls have been mainly responsible for the rise in the number of A grades.

A True  
B False  
C Cannot tell

☐

Answer

18. Twenty per cent of candidates now realize a score over 60%.

- A True
- B False
- C Cannot tell

☐

Answer

## **Passage 7**

Many barristers hold that the compensation culture is in fact hype and imagined. They rely on the fact that the number of compensation cases going through the courts is falling. Others believe that they are wrong because the figure excludes the large increase in the numbers of claims brought to industrial tribunals and because they ignore the widespread fear of compensation. A fear of being sued, it is argued, has changed day-to-day life and this is what is meant by the compensation culture. These changes include the cancellation of school outings and the banning of ball games in the park. Bizarre judgments have also added to a sense of compensation culture; an example of such a judgment is the successful case of the prisoner who sued the prison service after he fell from a roof when trying to escape.

19. The case made for the compensation culture is entirely anecdotal.

- A True
- B False
- C Cannot tell

☐

Answer

20. The warnings printed on paper cups stating that the drink inside is hot so we should exercise extreme caution could be used as another example of how the fear of being sued has impacted on everyday life.

- A True
- B False
- C Cannot tell

☐

Answer

21. If you discount claims that originate from employment then the view that we now face a higher risk of a claim for compensation is indeed imagined.

A True  
B False  
C Cannot tell

☐

Answer

## Passage 8

The amount of liquid assets held by non-financial corporations has almost doubled over the past five years. The increase in assets relative to debt is in sharp contrast to the late 1990s, when companies raised large amounts of debt to fund capital investments and acquisitions. The reluctance of companies today to spend, despite the fact that they hold large amounts of cash, shows that they are unwilling to make the mistake again of over-investment leading to production greater than demand. Telecommunications and high-technology companies were among the big spenders then and they suffered its effects more than most; they are now the most thrifty. Drug companies also want to keep cash at hand in order to fund expensive lawsuits should they arise. Other sectors with large workforces are having to hoard cash because they face large pension shortfalls.

22. In the late 1990s, capital spending in the telecommunications and high-technology sectors led to production outstripping supply.

A True  
B False  
C Cannot tell

☐

Answer

23. Cash at hand is a symptom of a cautious business outlook.

- A True
- B False
- C Cannot tell

☐

Answer

24. The passage implies that over-investment leads to production outstripping demand.

- A True
- B False
- C Cannot tell

☐

Answer

## **Passage 9**

The first salmon farms were in the Atlantic islands but the industry fell into dramatic decline with the value of the farmed fish when the farming method became discredited because of the use of chemicals and concerns over the feed used. Now they are farming cod in the Atlantic isles, only this time they have set rules for fish welfare and are feeding the cod on fish meal produced only from the by-products of fish already caught for human consumption. The enclosure nets in which the fish are grown are cleaned mechanically rather than treated with chemicals to stop them becoming fouled with weed. Cod, unlike salmon, are a gregarious species that naturally shoal and, unlike salmon, they do not need to be treated with insecticide to control fish lice.

25. A gregarious species of fish will be happier to swim around a net enclosure with a lot of other fish.

- A True
- B False
- C Cannot tell

☐

Answer

26. The cod farmers are taking measures to avoid the mistakes of the salmon farmers.

- A True
- B False
- C Cannot tell

☐

Answer

27. Measures are being taken to raise the cod humanely.

- A True
- B False
- C Cannot tell

☐

Answer

## Passage 10

Nuclear power is carbon free and new nuclear power plants do produce less radioactive waste than the older ones but the problem still exists, so building new nuclear power stations would address the long-term environmental problem of carbon emissions but only by exacerbating another problem. Critics complain of the visual intrusion caused by the renewable power stations, but appropriate planning can limit this and it is reversible. Nuclear power's electricity is expensive when compared with carbon-producing gas or coal plants. Renewable energy sources when compared with nuclear are relatively cheap and have the potential to become cheaper.

28. A very good environmental case for nuclear power could be made if the problem of radioactive waste could be solved.

- A True
- B False
- C Cannot tell

☐

Answer

29. Alternatives to nuclear that are carbon-free power sources have problems of their own.

- A True
- B False
- C Cannot tell

☐

Answer

30. Renewable power is carbon free.

- A True
- B False
- C Cannot tell

☐

Answer

## **Passage 11**

Accountants are pressing the government to allow them a client confidentiality defence if they suspect a client of money laundering or tax avoidance. The government is relying on new legislation concerning the issue of disclosure by lawyers and accountants to make substantial cuts in both money hidden by criminals and the amount of unpaid tax. Consultation has begun about giving accountants the same protection as lawyers on the issue of laundering but the government has rejected claims that lawyers have any more protection than accountants on the issue of disclosing tax avoidance.

31. There are two issues at stake and it would seem that the current rules are different for lawyers and accountants.

- A True
- B False
- C Cannot tell

☐

Answer

32. The legislation will require lawyers and accountants to provide confidential information to the government about all their clients.

- A True
- B False
- C Cannot tell

☐

Answer

33. The accountants want parity with lawyers.

- A True
- B False
- C Cannot tell

☐

Answer

## Passage 12

The most commonly cited reasons for companies to use the internet for recruitment were cost-effectiveness, ease of use and the potential to access a larger number of candidates. In the past year the number of organizations using the internet to fill jobs has risen by almost a third. Now 12 million job seekers are expected to apply online in the UK each year. In the United States 51% of all jobs were advertised online; the UK figure is around 27%, so analysts feel that there is still considerable growth left in the UK market. The age of online recruitment seems to have arrived, but many companies are using it only as one part of a multimedia recruitment strategy.

34. To be sure to access an even larger number of candidates a company must advertise vacancies on the internet as well as through more traditional media.

- A True
- B False
- C Cannot tell

☐

Answer



35. The majority of UK jobs are now advertised on the internet.

- A True
- B False
- C Cannot tell

☐

Answer

36. One reason for online recruitment's popularity is because it represents good value.

- A True
- B False
- C Cannot tell

☐

Answer

## **Passage 13**

Under 5% of employers test their staff for the use of recreational drugs and the vast majority do not consider substance abuse to be a significant issue in their workplace. Evidence of a link between drug abuse and accidents or low productivity is hard to find. More studies found a link between alcoholism and a detrimental impact on safety and performance than a link with drugs, either so-called soft drugs such as cannabis or class 1 drugs such as cocaine. Employers face problems if they decide that they should test staff for drugs. In addition to ethical considerations, employees have a right to privacy under the Human Rights Act; however, the employer also has a duty to provide a safe workplace and has a duty of care to take every reasonable step to ensure safety at work under the Health and Safety at Work Act. In some industries, for example the transport and nuclear power industries, employers do routinely test their staff for drug use.

37. There is evidence that the use of recreational drugs is irrelevant to most employers.

- A True
- B False
- C Cannot tell

☐

Answer

38. There is no conflict between the right to privacy and the right to a safe place of work.

- A True
- B False
- C Cannot tell

☐

Answer

39. Society cannot afford the risk of an accident caused by an employee on drugs in the transport or nuclear industry and that is why testing takes place in those industries.

- A True
- B False
- C Cannot tell

☐

Answer

## **Passage 14**

We are such optimists and opportunists that we find it hard not to adopt every new technology as soon as it comes along. As a result, we tend to discover the adverse consequences of these new practices the hard way. When problems emerge, as they inevitably seem to do, we set about a search for a better technology to help solve or alleviate the problems created by the first. However, some commentators argue that the debate over the introduction of new technology to genetically modify crops was not about an existing technology but about a proposed one, and for once they claim we tried to identify the benefits and risks before running blindly into them. The example is held up as a new way of assessing technologies before adopting them, and governments are urged to require companies to test and environmentally model new technologies before they are introduced. The difficulty with such a recommendation to governments is that not all will adopt them and most new technologies are introduced by multinational companies that exist beyond the control of one or a few governments. These companies therefore can choose to avoid new controls over their commercial activities by simply taking their developmental work elsewhere.

40. Environmental problems such as acid rain or ozone depletion might have been avoided had the new approach been adopted in the past.

A True  
B False  
C Cannot tell

☐

Answer

41. If our government were to adopt the recommendation then we could look forward to no longer lurching from one failed technology to the next.

A True  
B False  
C Cannot tell

☐

Answer

42. Some governments are already requiring companies to test and environmentally model the impact of new technologies before introducing them.

A True  
B False  
C Cannot tell

☐

Answer

## Passage 15

Researchers believe that there is growing evidence to support the hypothesis that attention deficit hyperactivity disorder (ADHD) should not be dismissed as ordinary bad behaviour but should be recognized as a serious childhood disease. It is claimed that as many as one in five children are at risk of suffering this condition, which is linked to an increased risk of serious illness in adulthood. The disease is not caused by bad parenting, but a chaotic or difficult home environment in a child's early years activates the syndrome where there already exists a genetic predisposition. If left untreated, sufferers were found to be four times more likely to suffer from mental illness as young adults.

43. ADHD is triggered by specific environmental circumstances.

A True  
B False  
C Cannot tell

☐

Answer

44. It can be inferred from the passage that as many as one in five young children suffer a chaotic or difficult home environment.

A True  
B False  
C Cannot tell

☐

Answer

45. Children with ADHD are more likely to suffer mental illness as young adults.

- A True
- B False
- C Cannot tell

☐

Answer

## **Passage 16**

If the number of extra households in London rises at the rate suggested then house prices in that capital city are predicted to rise even further and pull further ahead still of house prices in the rest of the UK. Relative to the UK average, house prices in the capital have dropped back to their lowest level for more than five years. The rapid growth in the number of people wanting to live in London over the next two decades suggests that this trend is likely to be reversed. In the short term the trend of prices rising further in the rest of the country relative to London is expected to continue.

46. In real terms houses are cheaper in London than they were five years ago.

- A True
- B False
- C Cannot tell

☐

Answer

47. In 20 years' time the price of a house in London is expected to rise faster than the price of houses in the rest of the UK.

- A True
- B False
- C Cannot tell

☐

Answer

48. A widening divide between the price of houses in the capital and the rest of the country will be driven by high levels of demand for housing.

A True  
B False  
C Cannot tell

☐

Answer

## Passage 17

In the 1950s, nitrates – preservative used in processed meats and occurring naturally in green foods – were linked to stomach cancer. More recently, biologists are claiming a positive role for dietary nitrates. Concerns were first raised when high doses of a nitrate compound commonly present in the stomach were found to cause cancer in laboratory rats. But the findings of this early study could not be consistently repeated, and the results of a great many subsequent epidemiological studies found no link between nitrates and human stomach cancer. The discovery of a positive role began with the realization that our stomachs hold large amounts of nitrate oxide and it was proposed that this agent may be helping to kill bacteria in our food such as *E. coli*. Stomach acid has for decades been considered the body's main means of killing dangerous germs in our diet. But it was found that stomach acid and nitrate oxide when mixed together killed such germs much more quickly.

49. A compound of nitrate is carcinogenic.

A True  
B False  
C Cannot tell

☐

Answer

50. A relationship between the ingestion of nitrates and human stomach cancer has not been substantiated.

- A True
- B False
- C Cannot tell

☐

Answer

51. Dietary nitrate, far from being a risk to health, is in fact an important natural defence against infections.

- A True
- B False
- C Cannot tell

☐

Answer

## **Passage 18**

Faced with the spiralling costs of medical care and double-digit increases in premiums for the fifth year running, American insurers and employers who offer employee medical cover are desperately looking for innovative ways to tackle the astronomical cost of medical insurance in the United States. One initiative that is proving effective involves encouraging employees to undertake health risk assessments and then following the assessment up with help to adjust lifestyles in order to reduce any identified risks. The idea is that such preventive measures will stop conditions from developing in the first place and reduce the need for future expensive interventions. Employees are encouraged to take much more responsibility for their own medical care and the cost of it. This is achieved by offering sufferers with known conditions incentives if they attend specialist centres set up by the insurers to manage the condition rather than doing nothing until the condition becomes chronic and they then require much more expensive general hospital care.

52. The new approach is described as involving a degree of compulsion.

- A True
- B False
- C Cannot tell

☐

Answer

53. All consumers of health care benefit from this initiative.

- A True
- B False
- C Cannot tell

☐

Answer

54. Under the initiative an employee who smokes might be offered help to give up so that, if the insured person is successful in stopping, the insurance company will avoid the further cost of providing treatment for the many harmful effects of smoking.

- A True
- B False
- C Cannot tell

☐

Answer



## **Passage 19**

The car of 2020 will probably have a hydrogen-powered cell to charge batteries that drive the wheels. The thermodynamic efficiency of this vehicle will be around 60% compared with an efficiency of 23% for the typical car being driven around on our roads today and it will have a range of 500 kilometres between fuel stops. Currently the best published fuel cell thermodynamic efficiency is claimed by an experimental vehicle in the United States with an efficiency of 39%; this compares with 40% for the most efficient internal combustion diesel-powered production car currently on the market. In the foretold hydrogen economy, accidents in which hydrogen is released into the environment will be far more commonplace, and hydrogen is a very potent greenhouse gas. Proponents of a hydrogen economy argue that leaks and emissions would in fact not pose catastrophic damage to the environment because the hydrogen infrastructure of production and storage would be far more centralized than the current petroleum infrastructure and this would mean that the monitoring and repair of leaks and emissions could be better managed and technological upgrades could be more readily implemented.

55. The overall benefits of hydrogen currently seem lacking.

- A True
- B False
- C Cannot tell

☐

Answer

56. A hydrogen economy would be worse for the environment than the current petroleum economy.

- A True
- B False
- C Cannot tell

☐

Answer

57. The passage is supportive of the development of an automotive fuel cell.

- A True
- B False
- C Cannot tell

☐

Answer

## Passage 20

A deterioration of adolescents' mental health over the past 25 years has been reported. The rate of emotional problems such as anxiety and depression has increased by 60% among teenagers. Girls in particular are more likely to suffer emotional problems but the rate at which these problems have increased is far higher among boys. The increase is not explained by the increase in single parenthood. The increases were found across all types of family. Nor can the deterioration be put down to greater inequality, as again the rate of problems reported was consistent across social class. No differences were found in racial origin using a representative sample of adolescents suffering these problems from all the major ethnic groups.

58. The research is an example of a time trend study.

- A True
- B False
- C Cannot tell

☐

Answer

59. The findings highlight a very widespread malaise.

- A True
- B False
- C Cannot tell

☐

Answer

60. The possible causes of the sharp decline in teenage health are not considered.

- A True
- B False
- C Cannot tell

☐

Answer

## **Passage 21**

A link between demographics and savings is sometimes based on a theory of investment that runs thus: young people borrow, middle-aged people save and the elderly draw from their savings. According to this theory, borrowing should be highest when a population is disproportionately young, and savings should be highest when that disproportional cohort reaches middle age.

61. When a population is disproportionately young, the cost of borrowing will be high and the yield from a low rate of saving will be high.

- A True
- B False
- C Cannot tell

☐

Answer

62. According to the theory, a high level of savings must mean that a population is disproportionately middle-aged.

- A True
- B False
- C Cannot tell

☐

Answer

63. When a population is disproportionately middle-aged then the cost of borrowing will fall and the supply of savings will rise and the yield of those savings will fall.

- A True
- B False
- C Cannot tell

☐

Answer

## Passage 22

The newly deployed ground-based mid-course missile defence system comprises 10 interceptor missiles, each of which is intended to collide in outer space with an incoming hostile missile. So far in field trials the system has successfully intercepted target missiles in five out of eight flight tests. Critics say that these trials prove very little. Live tests are very expensive, take a great deal of organization and are usually limited by concerns over safety (you really do not want one of these missiles going astray and crashing into a city centre, for example). For these reasons, a lot of the development programme has relied on models and simulations rather than real flight tests. Both critics and supporters of the programme accept that these models do a far better job of predicting the performance of system components than of predicting the performance of the system overall.

64. So far only eight tests have been conducted.

- A True
- B False
- C Cannot tell

☐

Answer

65. The primary verification tool for the efficiency of the missile defence system has been virtual.

- A True
- B False
- C Cannot tell

☐

Answer

66. Simulation and theoretical models cannot capture all the variables that can occur in a real missile engagement.

- A True
- B False
- C Cannot tell

☐

Answer

End of test

# 4

## 20 numerical reasoning mini-tests

Even when we are really busy it is possible to find a spare 10 minutes to complete one of these mini tests. This chapter comprises 200 questions organized as 20 mini-tests. Each contains 10 multiple choice questions and you should complete them in 10 minutes.

Use these tests to be sure of the very best start in a real graduate level data interpretation test. A good start is important in every test but it is especially important if you face a computer administered test because they are often computer adaptive. This means that the first question will be of the level that the 'average' candidate should get right. The next question will be a bit harder and so on. But, and this is important, you have to get the first question right before the programme presents you with the harder questions. Keep getting the questions right and you will soon be following along branches into the upper percentiles rapidly leading to the level that will win you a place through to the next stage in the recruitment process. Get the first few questions wrong, however, and the computer adaptive test will present you with easier questions and you will struggle to achieve the level expected by many institutions. This adaptive process continues through the test so keep trying to get as many questions right as possible to maximize your chance of being awarded a winning score.

If you use these tests to adopt and practice a 'no going back' strategy, you will develop an effective exam technique. Read each

question carefully, calculate your answer and then reread the question again. When you are sure about your answer, submit it by writing A, B, C or D in the box. When you have rechecked your choice move onto the next question. Resist the temptation to review your answers once you have moved on to the next question.

Get the most out of this practice by setting yourself the personal challenge of trying to beat your last score or getting all five questions right each time. You will need to try hard and take the challenge seriously if you are to succeed in this. By practising like this you will create a realistic real test feel and prove to yourself that you have mastered the numerical competencies tested in graduate psychometric tests.

If you keep getting one sort of question wrong then focus your practise on that type of question until you overcome the personal challenge they represent. Then return to these mini-tests. Keep practising until you consistently get all 10 questions right in the time allowed. The only thing then left to do is apply this skill in the mock tests in Chapter 5 and the real test!

So many graduate numerical tests require you both to be competent in the key mathematical operations and to demonstrate that you can reason with figures with or without a calculator. Even when you are allowed a calculator, a well-practised candidate will often be quicker without one and, importantly, will know if under the pressure of the test they have miskeyed a sum. It is often the case that an onscreen calculator is slow to use and many do not have all the features of the hand-held calculator that you use. For example, some onscreen calculators do not have a powers function. So put the calculator away and undertake this practice without one!

This chapter is intended for the vast majority of graduates who have not needed to apply their numeracy skills in an exam-type situation since their GCSEs. It seeks to build confidence in the key competencies and assist in the development of the skills, speed and accuracy necessary to survive a real graduate psychometric test of numerical skills.

A major focus of the material is on the operation of percentages. Above all other mathematical operations, in tests used to select graduates and managers across a wide range of industries you are expected to

demonstrate complete competence in this operation, such as calculating percentage increase or decrease and percentage profit or loss. Another operation covered in some detail is ratios.

There are hundreds more practice questions in *How to Pass Numeracy Tests* and *How to Pass Advanced Numeracy Tests*. More elementary material can be found in *How to Pass Numerical Reasoning Tests*, *The Advanced Numeracy Test Workbook* and *The Numeracy Test Workbook*, all published by Kogan Page.

If you are numerically accomplished then you may still find this chapter of practical use by attempting the tests in five minutes instead of 10.

Work without interruption. Do not use a calculator. Answers and explanations can be found in Chapter 6.

Do not turn over the page until you are ready to begin the first mini-test.



## **Mini test 1**

1. What is 30% of 55?

- A 16
- B 16.5
- C 17
- D 17.5

Answer

2. What is 80% of 12?

- A 9.3
- B 9.4
- C 9.5
- D 9.6

Answer

3. What is 5% of 450?

- A 21.5
- B 22
- C 22.5
- D 23

Answer

4. What is 17% of 15?

- A 2.55
- B 2.56
- C 2.57
- D 2.58

Answer

5. What is 22% of 175?

- A 38.5
- B 38.6
- C 38.7
- D 38.8

Answer

6. What is 38% of 60?

- A 22.5
- B 22.6
- C 22.7
- D 22.8

Answer

7. What is 11% of 220?

- A 24.0
- B 24.1
- C 24.2
- D 24.3

Answer

8. What is 90% of 480?

- A 431.8
- B 432.0
- C 432.2
- D 432.4

Answer

9. What is 57% of 75?

- A 42.50
- B 42.75
- C 43.0
- D 43.25

Answer

10. What is 74% of 360?

- A 266.0
- B 266.2
- C 266.4
- D 266.6

Answer

End of test

## Mini test 2

11. What is 60% of 98?

- A 58.2
- B 58.4
- C 58.6
- D 58.8

Answer

12. What is 23% of 330?

- A 75.7
- B 75.9
- C 76.1
- D 76.3

Answer

13. What is 56% of 0.5?

- A 0.26
- B 0.27
- C 0.28
- D 0.29

Answer

14. What is 7% of 580?

- A 40.3
- B 40.4
- C 40.5
- D 40.6

Answer

15. What is 36% of 90?

- A 32.4
- B 32.3
- C 32.2
- D 32.1

Answer

16. What is 13% of 70?

- A 9.0
- B 9.1
- C 9.2
- D 9.3

Answer

17. What is 41% of 160?

- A 65.2
- B 65.4
- C 65.6
- D 65.8

Answer

18. What is 14% of 45?

- A 6.1
- B 6.2
- C 6.3
- D 6.4

Answer

19. What is 84% of 84?

- A 84
- B 76.33
- C 72.13
- D 70.56

Answer

20. What is 50p as a percentage of £25?

- A 2%
- B 3%
- C 4%
- D 5%

Answer

End of test

### **Mini test 3**

21. What is 100 ml as a percentage of 2 litres?

- A 3%
- B 4%
- C 5%
- D 6%

Answer

22. What is 6 minutes as a percentage of 2 hours?

- A 4%
- B 5%
- C 6%
- D 7%

Answer

23. What is 500mm as a percentage of 1km?

- A 0.5%
- B 0.25%
- C 0.1%
- D 0.05%

Answer

24. What is 25p as a percentage of £100?

- A 2.5%
- B 1.25%
- C 0.75%
- D 0.25%

Answer

25. What is 26 weeks as a percentage of 4 years?

- A 15%
- B 12.5%
- C 10%
- D 7.5%

Answer

26. What is 45 metres as a percentage of 2 kilometres?

- A 2.25%
- B 2.5%
- C 2.75%
- D 3.0%

Answer

27. What is 50 grams as a percentage of 4 kilos?

- A 1.0%
- B 1.25%
- C 1.5%
- D 1.75%

Answer

28. What is 30 minutes expressed as a percentage of 8 hours?

- A 5.75%
- B 6.0%
- C 6.25%
- D 6.5%

Answer



29. What is 40 gm as a percentage of 10 kilograms?

- A 0.25%
- B 0.3%
- C 0.35%
- D 0.4%

☐

Answer

30. What is \$0.75 as a percentage of \$50?

- A 1.75%
- B 1.5%
- C 1.25%
- D 1.5%

☐

Answer

End of test

**Mini test 4**

31. What is 30 seconds as a percentage of 1 hour 40 minutes?

- A 0.5%
- B 0.75%
- C 1%
- D 1.25%

Answer

32. What is 400 mm as a percentage of 12 metres? (Express your answer to two decimal places.)

- A 2.33%
- B 2.66%
- C 3.33%
- D 3.66%

Answer

33. What is 168 metres as a percentage of 1.2 kilometres?

- A 14%
- B 14.5%
- C 15%
- D 15.5%

Answer

34. What is 7.3 days as a percentage of a non-leap year?

- A 1%
- B 1.5%
- C 2%
- D 2.5%

Answer

35. What is £1.80 as a percentage of £45?

- A 3%
- B 4%
- C 5%
- D 6%

Answer

36. Find 45 as a percentage of 200.

- A 21%
- B 21.5%
- C 22%
- D 22.5%

Answer

37. Find 630 as a percentage of 700.

- A 89%
- B 90%
- C 91%
- D 92%

Answer

38. Find 31.5 as a percentage of 126.

- A 27%
- B 26%
- C 25%
- D 24%

Answer

39. Find 5.4 as a percentage of 90.

- A 6%
- B 6.2%
- C 6.4%
- D 6.6%

Answer

40. Find 32 as a percentage of 96. (The answer is expressed to 4 sf.)

- A 33.99%
- B 33.66%
- C 33.45%
- D 33.33%

Answer

End of test

## **Mini test 5**

41. Find 144 as a percentage of 450.

- A 30%
- B 31%
- C 32%
- D 33%

Answer

42. Find 135 as a percentage of 300.

- A 45%
- B 44%
- C 43%
- D 42%

Answer

43. Find 72 as a percentage of 360.

- A 18%
- B 19%
- C 20%
- D 21%

Answer

44. Find 42.5 as a percentage of 250.

- A 16%
- B 17%
- C 18%
- D 19%

Answer

45. Find 665 as a percentage of 1,900.

- A 32%
- B 33%
- C 34%
- D 35%

Answer

46. Find 10 as a percentage of 60. (The answer is expressed to 3 sf.)

- A 16.8%
- B 16.7%
- C 16.6%
- D 16.5%

Answer

47. Find 21 as a percentage of 140.

- A 15%
- B 14%
- C 13%
- D 12%

Answer

48. Find 17 as a percentage of 20.

- A 16%
- B 83%
- C 84%
- D 85%

Answer

49. Find 24 as a percentage of 64.

- A 36.5%
- B 37%
- C 37.5%
- D 38%

Answer

50. Find 11 as a percentage of 40.

- A 27.5%
- B 27.4%
- C 27.3%
- D 27.2%

Answer

End of test

**Mini test 6**

51. Find 360 as a percentage of 450.

- A 78%
- B 79%
- C 80%
- D 81%

Answer

52. Find 165 as a percentage of 400.

- A 41.25%
- B 41.5%
- C 41.75%
- D 42%

Answer

53. Find 120 as a percentage of 250.

- A 49%
- B 48%
- C 47%
- D 46%

Answer

54. Find 1,200 as a percentage of 1,600.

- A 78%
- B 77%
- C 76%
- D 75%

Answer



55. Find 19.2 as a percentage of 80.

- A 23%
- B 24%
- C 25%
- D 26%

Answer

56. An item is decreased from £8 to £6. What is the percentage change?

- A 27%
- B 26%
- C 25%
- D 23%

Answer

57. An item is increased from £60 to £78. Find the percentage change.

- A 30%
- B 31%
- C 32%
- D 33%

Answer

58. An item is decreased to £28 from £70. What is the percentage change?

- A 63%
- B 62%
- C 61%
- D 60%

Answer

59. An item is increased to £87 from £75. Find the percentage change.

- A 15%
- B 16%
- C 17%
- D 18%

Answer

60. What is the percentage decrease between 15 and 12?

- A 22%
- B 21%
- C 20%
- D 19%

Answer

End of test

## Mini test 7

61. Find the percentage increase between 24 and 27.

- A 12.5%
- B 12.4%
- C 12.3%
- D 12.2%

Answer

62. An item is decreased from £83 to £24.90. What is the percentage change?

- A 68%
- B 69%
- C 70%
- D 71%

Answer

63. An item is increased from £8 to £11.20. Find the percentage change.

- A 41%
- B 40%
- C 39%
- D 38%

Answer

64. An item is decreased to £26.40 from £44. What is the percentage change?

- A 40%
- B 41%
- C 42%
- D 43%

Answer

65. An item is increased to £52.90 from £46. Find the percentage change.

- A 12%
- B 13%
- C 14%
- D 15%

Answer

66. What is the percentage change between 69 and 55.2?

- A 22%
- B 21%
- C 20%
- D 19%

Answer

67. A price is increased from 36p to 45p. Find the percentage change.

- A 23%
- B 24%
- C 25%
- D 26%

Answer

68. A price is decreased from £23 to £18.40. What is the percentage change?

- A 20%
- B 21.5%
- C 22.5%
- D 23%

Answer

69. A price is increased to £15.60 from £12. Find the percentage change.

- A 29%
- B 30%
- C 31%
- D 32%

Answer

70. A price is decreased to £75.60 from £90. What is the percentage change?

- A 19%
- B 18%
- C 17%
- D 16%

Answer

End of test

**Mini test 8**

71. A price is increased from £74 to £77.70. Find the percentage change.

- A 7%
- B 6%
- C 5%
- D 4%

Answer

72. A price is decreased from £52.25 to £55. What is the percentage change?

- A 5%
- B 6%
- C 7%
- D 8%

Answer

73. A figure is increased from 7 to 13.3. Find the percentage change.

- A 87%
- B 88%
- C 89%
- D 90%

Answer

74. A figure is increased from 14 to 23.8. Find the percentage change.

- A 71%
- B 70%
- C 69%
- D 68%

Answer

75. A figure is decreased from 36 to 31.5. What is the percentage change?

- A 12%
- B 12.5%
- C 13%
- D 13.5%

Answer

76. An item was bought for 15p and sold for 12p. What was the percentage profit or loss?

- A 19% profit
- B 20% profit
- C 20% loss
- D 21% loss

Answer

77. An item was bought for 30p and sold for 42p. What was the percentage profit or loss?

- A 40% profit
- B 41% profit
- C 39% loss
- D 38% loss

Answer

78. An item was bought for £40 and sold for £42. What was the percentage profit or loss?

- A 4% profit
- B 5% profit
- C 5% loss
- D 4% loss

Answer

79. An item was bought for £800 and sold for £72. What was the percentage profit or loss?

- A 89% loss
- B 90% profit
- C 91% loss
- D 92% profit

Answer

80. An item was bought for £70 and sold for £72.10. What was the percentage profit or loss?

- A 4% profit
- B 4% loss
- C 5% loss
- D 3% profit

Answer

End of test



## **Mini test 9**

81. An item was bought for £55 and sold for £31.90. What was the percentage profit or loss?

- A 42% loss
- B 41% loss
- C 40% profit
- D 41% profit

Answer

82. An item was bought for £17.80 and sold for £20.47. What was the percentage profit or loss?

- A 14% loss
- B 15% loss
- C 15% profit
- D 13% profit

Answer

83. An item was bought for £40.40 and sold for £10.10. What was the percentage profit or loss?

- A 73% loss
- B 75% loss
- C 73% profit
- D 74% profit

Answer

84. An item was bought for £75 and sold for £93.75. What was the percentage profit or loss?

- A 25% loss
- B 25% profit
- C 23% loss
- D 23% profit

Answer

85. An item was bought for £110 and sold for £100.10. What was the percentage profit or loss?

- A 10% profit
- B 10% loss
- C 9% profit
- D 9% loss

Answer

86. Divide 150 into the ratio 2:3.

- A 60:90
- B 100:50
- C 40:110
- D 90:60

Answer

87. Divide 90 into the ratio 1:4.

- A 17:73
- B 36:54
- C 18:72
- D 54:36

Answer

88. Divide 96 into the ratio 7:1.

- A 24:72
- B 60:36
- C 72:24
- D 84:12

Answer

89. Divide 135 into the ratio 2:7.

- A 15:120
- B 30:105
- C 45:90
- D 40:95

Answer

90. Divide 180 into the ratio 5:4.

- A 60:120
- B 120:60
- C 110:70
- D 100:80

Answer

End of test

**Mini test 10**

91. Divide 117 into the ratio 6:3.

- A 78:39
- B 77:40
- C 76:41
- D 75:42

Answer

92. Divide 200 into the ratio 3:5.

- A 100:100
- B 75:125
- C 75:150
- D 50:150

Answer

93. Divide 450 into the ratio 3:2:4.

- A 150:200:100
- B 200:150:100
- C 150:100:200
- D 100:150:200

Answer

94. Divide 270 into the ratio 2:3:1.

- A 90:135:45
- B 90:130:45
- C 135:90:45
- D 90:45:135

Answer

95. Divide 192 into the ratio 9:7:8.

- A 72:56:62
- B 72:52:66
- C 72:54:64
- D 72:56:64

☐

Answer

96. Divide 1,320 into the ratio 8:3:11.

- A 480:640:200
- B 480:180:660
- C 480:180:640
- D 480:660:180

☐

Answer

97. Divide 85 into the ratio 2:6:9.

- A 10:35:40
- B 10:30:35
- C 10:30:45
- D 10:25:50

☐

Answer

98. Divide 168 into the ratio 7:2:5.

- A 80:24:64
- B 84:24:60
- C 84:38:46
- D 84:20:64

☐

Answer

99. Divide 128 into the ratio 3:9:4.

- A 32:72:24
- B 24:32:72
- C 26:70:32
- D 24:72:32

Answer

100. Divide 1,800 into the ratio 4:5:1.

- A 720:900:180
- B 700:920:180
- C 540:820:360
- D 720:820:260

Answer

End of test

## **Mini test 11**

101. A ratio in its simplest form comprises only whole numbers that have no common factor other than 1. Express 63:18 as a ratio in its simplest form.

- A 6:2
- B 7:2
- C 8:2
- D 9:2

Answer

102. Express 27:54 as a ratio in its simplest form.

- A 1:2
- B 2:3
- C 3:4
- D 2:5

Answer

103. Express 15:9 as a ratio in its simplest form.

- A 2:1
- B 3:2
- C 4:3
- D 5:3

Answer

104. Express 54:24 as a ratio in its simplest form.

- A 6:5
- B 7:4
- C 8:3
- D 9:4

Answer

105. Express 28:32 as a ratio in its simplest form.

- A 5:3
- B 6:5
- C 7:8
- D 8:7

Answer

106. Express 13:39 as a ratio in its simplest form.

- A 1:3
- B 1:5
- C 2:3
- D 3:7

Answer

107. Express 14:49 as a ratio in its simplest form.

- A 7:2
- B 6:11
- C 3:8
- D 2:7

Answer

108. Express 15:3 as a ratio in its simplest form.

- A 4:1
- B 5:1
- C 6:1
- D 7:1

Answer



109. Express 72:60 as a ratio in its simplest form.

- A 5:7
- B 6:7
- C 6:5
- D 7:6

☐

Answer

110. Express 20:25 as a ratio in its simplest form.

- A 1:5
- B 2:5
- C 3:5
- D 4:5

☐

Answer

End of test

**Mini test 12**

111. Express 9:6:12 as a ratio in its simplest form.

- A 3:3:6
- B 3:2:4
- C 3:1:4
- D 3:2:3

Answer

112. Express 20:30:5 as a ratio in its simplest form.

- A 4:6:1
- B 5:3:1
- C 2:3:0.5
- D 4:5:1

Answer

113. Express 32:8:12 as a ratio in its simplest form.

- A 5:4:6
- B 16:4:6
- C 8:2:3
- D 7:3:4

Answer

114. Express 45:18:9 as a ratio in its simplest form.

- A 15:6:3
- B 5:2:1
- C 9:6:3
- D 7:6:3

Answer

115. Express 54:6:30 as a ratio in its simplest form.

- A 9:1:5
- B 6:3:15
- C 8:2:3
- D 7:3:10

Answer

116. A salesperson receives 8% commission on the value of sales. How much commission is due on £4,550?

- A £364
- B £365
- C £366
- D £367

Answer

117. If the value of a computer depreciates by 6% each year, how much is a £650 computer worth after two years?

- A £574.32
- B £574.33
- C £574.34
- D £574.35

Answer

118. A carpet when laid stretches 5%. If after being laid it measures 63m long, how long was it before being fitted?

- A 58m
- B 59m
- C 60m
- D 61m

Answer

119. After selling 40% of his original holding, a property developer is left with 3 acres of land. How much did he originally own?

- A 3 acres
- B 4 acres
- C 5 acres
- D 6 acres

Answer

120. A suite of furniture is advertised at £690 after a 15% price increase. What was the original price?

- A £590
- B £600
- C £610
- D £620

Answer

End of test

## **Mini test 13**

121. If the working week were to be decreased from 35 to 28 hours, what percentage decrease would this represent?

- A 17%
- B 18%
- C 19%
- D 20%

Answer

122. Two items are bought for £5.00 and sold individually for £3.10 each. What is the percentage profit?

- A 23%
- B 24%
- C 25%
- D 26%

Answer

123. The time taken to complete an order increases by 15 minutes to 5 hours 15 minutes. What is the percentage increase?

- A 5%
- B 6%
- C 7%
- D 8%

Answer

124. A commercial rent of £3,200 is decreased to £3,008. What percentage decrease in income does the landlord suffer?

A 4%  
B 5%  
C 6%  
D 7%

Answer

125. An investment is found to increase by 12% to £1,008. What was the original amount invested?

A £900  
B £910  
C £920  
D £930

Answer

126. In a survey, 3,200 people took part, of whom 1,280 were aged 65 or over. What percentage of respondents belonged to this cohort?

A 30%  
B 35%  
C 40%  
D 45%

Answer

127. A company with 32 employees makes 12 redundant. What percentage reduction in employees is this?

A 36.5%  
B 37%  
C 37.5%  
D 38%

Answer

128. An investment increases in value from £220 to £253. What percentage increase is this?

- A 14%
- B 15%
- C 16%
- D 17%

Answer

129. If a jar of coffee normally contains 320 grams and a special-offer jar contains 15% more, how many extra grams of coffee does the special-offer jar contain?

- A 48 grams
- B 49 grams
- C 50 grams
- D 51 grams

Answer

130. If a company increases its turnover from £180,000 to £234,000, what is the percentage increase?

- A 28%
- B 29%
- C 30%
- D 31%

Answer

End of test

**Mini test 14**

131. If a salary is increased from £25,000 to £26,750, what is the percentage increase?

- A 6%
- B 7%
- C 8%
- D 9%

Answer

132. The number of contracts awarded by a government department is found to have fallen from 3,200 to 2,336. What is this decrease expressed as a percentage?

- A 27%
- B 26%
- C 25%
- D 24%

Answer

133. A cinema has a capacity of 480 seats. If it is 80% full, how many seats are unoccupied?

- A 93
- B 94
- C 95
- D 96

Answer



134. A town's population of 14,000 is found to be increasing by 5% a year. What will the new population be after 2 years?

A 15,435  
B 15,354  
C 15,543  
D 15,534

Answer

135. An hourly wage is increased by 5% to £5.88. How much was the rate before the increase?

A £5.60  
B £5.70  
C £5.80  
D £5.90

Answer

136. In a sale an item is reduced by 20% on the normal price of £76.50. What is the sale price?

A £61.50  
B £61.40  
C £61.30  
D £61.20

Answer

137. A tin of flour weighs 350 grams, 40% of which is flour. How many grams of flour does the tin contain?

A 135 grams  
B 140 grams  
C 145 grams  
D 150 grams

Answer

138. If a job costs £400 to deliver but is only charged at £324, what is the percentage loss?

- A 17%
- B 18%
- C 19%
- D 20%

Answer

139. £2,400 commission is paid at 6% of the value of sales. What was the value of sales to generate the commission figure?

- A £39,900
- B £40,000
- C £40,100
- D £40,200

Answer

140. If a commodity goes up from \$23 to \$36.80, how much is the increase expressed as a percentage?

- A 60%
- B 61%
- C 62%
- D 63%

Answer

End of test

## **Mini test 15**

141. It takes 3 litres of paint to cover an area of 24 square metres. What percentage increase in the quantity of paint would be required to cover an area of 50.4 square metres?

A 90%  
B 100%  
C 110%  
D 120%

Answer

142. A trade discount of 7.5% is given on all purchases. If the value of the discount is worth £19.50, how much was the original value of the goods?

A £245  
B £250  
C £255  
D £260

Answer

143. From a total sample of 7,500, 4,875 responses were received. What percentage response rate is this?

A 65%  
B 60%  
C 55%  
D 50%

Answer

144. Of the people staying at a hotel, 80% arrived by car. If there were 480 guests, how many travelled this way?

A 383  
B 384  
C 385  
D 386

Answer

145. If a total shopping bill is £210, of which £31.50 was spent on food items, what percentage of the total was spent on non-food items?

A 85%  
B 80%  
C 75%  
D 70%

Answer

146. If a 6% increase in salary is received and the new salary level is £371, what was the salary before the increase?

A £320  
B £330  
C £340  
D £350

Answer

147. If a garage sells 42,000 litres of fuel each week and 14,000 litres of this is diesel, what whole-number percentage of all sales are diesel?

A 30%  
B 31%  
C 32%  
D 33%

Answer

148. A cereal was found to contain 15% fibre. How many grams of fibre would be found in a 125 gram serving?

- A 18.50 grams
- B 18.75 grams
- C 19.00 grams
- D 19.25 grams

Answer

149. If a new car that cost £8,325 has lost 30% of its value, by how much has its value fallen?

- A £2,297.50
- B £2,397.50
- C £2,497.50
- D £2,597.50

Answer

150. A health centre survey found that 45% of patients travelled less than one mile to the surgery. If 8,800 patients took part in the survey, how many of the respondents travelled less than one mile to see their doctor?

- A 3,960
- B 4,010
- C 4,060
- D 4,120

Answer

End of test

**Mini test 16**

151. A loss adjuster recommended to an insurance company that they only pay 37% of a claim for £50,000. If they take the advice, how much will the company pay out?

A £18,300  
B £18,500  
C £18,800  
D £19,100

Answer

152. A total shopping bill is £250, of which £42.50 is tax. What percentage of the total spend is tax?

A 15%  
B 16%  
C 17%  
D 18%

Answer

153. A survey found that 14% of respondents watched a particular TV programme. If 7,500 people took part in the survey, how many respondents reported that they did not watch the programme?

A 6,450  
B 6,500  
C 6,550  
D 6,600

Answer

154. If an item is reduced in a sale by 18% and it would have cost £36.00, how much do you save on the sale price?

- A £6.36
- B £6.40
- C £6.44
- D £6.48

Answer

155. An order for a 37.5 metre length of carpet is reduced by 4.5 metres. What percentage reduction in the original order does this represent?

- A 12%
- B 11%
- C 10%
- D 9%

Answer

156. If a 100 gram bar of chocolate contains 21 grams of fat and this is 40% of the recommended daily intake, what is the recommended daily intake of fat?

- A 51.0 grams
- B 51.5 grams
- C 52.0 grams
- D 52.5 grams

Answer

157. If each month an employee earns £1,800 net and spends £630 on rent, what percentage of his wage does he spend on this essential?

- A 35%
- B 36%
- C 37%
- D 38%

Answer

158. If a restaurant served 450 dinners and of these 360 were the chicken special, what percentage of the diners ate the special?

- A 75%
- B 80%
- C 85%
- D 90%

Answer

159. If a wage bill is increased from £18,000 to £20,160, what is the percentage increase?

- A 12%
- B 11%
- C 10%
- D 9%

Answer

160. If 15 biscuits weigh 90 grams and the weight of each biscuit is 22% butter, what is the weight of butter in one of the biscuits?

- A 1.32 grams
- B 1.31 grams
- C 1.30 grams
- D 1.29 grams

Answer

End of test



## **Mini test 17**

161. If a company enjoys a profit margin of 27%, what is the annual turnover in a year when £24,300 was reported as profit?

- A £88,000
- B £89,000
- C £90,000
- D £91,000

☐

Answer

162. If a salesman receives 8% commission on all sales and his sales have increased from £12,500 to £15,950, how much more commission will he receive?

- A £273
- B £274
- C £275
- D £276

☐

Answer

163. In May last year total sales were £630,000, and in June that year they increased to £693,000. In the current year total sales in May were £84,000, and in June they increased to £90,720. Which year experienced the greatest percentage increase between May and June?

- A Last year
- B This year

☐

Answer

164. On a management course attended by 440 delegates, 66 worked for private companies while 100 were freelance. What percentage worked for private companies?

A 15%  
B 14%  
C 13%  
D 12%

Answer

165. Of a sample of 800, 45% were found to be men and 30% women aged 30 or under. How many women are there in the sample aged over 30?

A 160  
B 180  
C 200  
D 220

Answer

166. The values of two funds are in the ratio of 7:9. If the value of the smaller fund is £6,300, what is the value of the larger fund?

A £7,800  
B £7,900  
C £8,000  
D £8,100

Answer

167. A company employs 72 staff; the ratio of full-time to part-time staff is 5:3. How many full-time staff are there?

A 24  
B 32  
C 45  
D 48

Answer

168. The ratio of successful loan applicants to unsuccessful applicants is 4:5. If there are 80 unsuccessful applicants, how many succeeded?

- A 64
- B 48
- C 32
- D 16

Answer

169. A production process uses materials in the ratio of 5:2. If 1,500 units of material A are used in a shift, how many units of B will remain if at the start of the shift the store held 800?

- A 150
- B 200
- C 250
- D 300

Answer

170. The ratio of service to manufacturing businesses in a town is 2:3. What is the percentage of service businesses in the town?

- A 20%
- B 30%
- C 40%
- D 50%

Answer

End of test

**Mini test 18**

171. Three investors A, B and C contribute £3,000, £4,500 and £10,500 to a business. A dividend of £4,800 is awarded and is shared in the ratio of the original investments. How much of the dividend does investor A receive?

A £800  
B £820  
C £840  
D £860

Answer

172. A journal records a transaction of £336 in the ratio of 5:3. What is the value of the lesser sum?

A £123  
B £124  
C £125  
D £126

Answer

173. If a company were to pay £900 tax on £2,700, how much tax would you expect it to pay on £15,000?

A £5,000  
B £3,750  
C £3,950  
D £4,150

Answer

174. Calculate the probability ratio (a comparison between the value of sales and net profit) of a company's sales total £210,000 and its net profit £140,000. (Express the ratio in its simplest form.)

A 7:2  
B 6:1  
C 5:2  
D 3:2

Answer

175. If a company wins 3 out of every 7 proposals made and it needs to win on average 12 proposals a year, how many proposals must be written in a 12-month period?

A 28  
B 29  
C 30  
D 31

Answer

176. Calculate the profitability ratio (a comparison between the value of sales and net profit) for a product that achieves a net profit of £18 million on sales of £72 million (express the ratio in its simplest form).

A 3:1  
B 4:1  
C 5:1  
D 6:1

Answer

177. Divide 20 by 400.

- A 0.5
- B 0.05
- C 0.005
- D 0.0005

Answer

178. A production process uses materials A, B and C in the ratio of 4:2:1. If an order is received for 1,050 kg of the finished product, how much of material A is required?

- A 450 kg
- B 500 kg
- C 550 kg
- D 600 kg

Answer

179. A journal records a transaction of £605, which is posted between two headings in the ratio of 7:4. What is the amount of the larger value?

- A 385
- B 386
- C 387
- D 388

Answer

180. Divide 7 by 50.

- A 0.14
- B 0.15
- C 0.16
- D 0.17

Answer

End of test

## Mini test 19

181. Calculate the profitability ratio (in its simplest form) if a net profit of £2.1 million is realized on sales totalling £35 million.

A 30:7

B 40:5

C 50:3

D 60:1

Answer

182. Divide 9 by 12

A 0.60

B 0.65

C 0.70

D 0.75

Answer

183. If monthly sales comprise in thousands 525 for white goods and 840 for brown goods, what is the ratio of the value of brown to white goods sold (expressed in its simplest form)?

A 6:1

B 7:3

C 8:5

D 9:4

Answer

184. Divide 12 by 300.

A 0.03

B 0.04

C 0.05

D 0.06

Answer

185. Against a portfolio of 5,000 household insurance policies, 20 claims for flood damage have been received. Express in its simplest form the rate at which this type of claim has occurred.

A 1 in 200  
 B 1 in 250  
 C 1 in 300  
 D 1 in 350

Answer

186. Divide 60 by 250.

A 0.24  
 B 0.25  
 C 0.26  
 D 0.27

Answer

187. A training budget of £6,000 is to be split between two departments so that one department gets three times as much as the other. How much does the better-off department get?

A £3,000  
 B £3,500  
 C £4,000  
 D £4,500

Answer

188. Divide 8 by 25.

A 0.31  
 B 0.32  
 C 0.33  
 D 0.34

Answer



189. Depreciation of £3,700 must be apportioned between A and B in the ratio of 3:7. How much will be posted against the budget of department B?

A £2,600

B £2,590

C £2,580

D £2,570

Answer

190. Divide 5 by 40.

A 0.123

B 0.125

C 0.127

D 0.129

Answer

End of test

## Mini test 20

191. Calculate a working capital ratio for a company financed through current assets of £1.24 million and current liabilities of £310,000. (To calculate a working capital ratio, express this relationship as a ratio in its simplest form.)

- A 3:1
- B 1:3
- C 4:1
- D 1:4

Answer

192. Divide 15 by 75.

- A 0.1
- B 0.2
- C 0.3
- D 0.4

Answer

193. Below are listed the three principal cost elements involved in a production process. Express the relationship as a ratio in its simplest form.

<i>Element</i>	<i>Cost per unit (in pence)</i>
Raw materials	3.6
Direct labour	6.0
Factory overheads	2.4

- A 6:10:4
- B 1:3:6
- C 3:5:2
- D 30:60:24

Answer

194. Divide 8 by 12.5.

- A 0.64
- B 0.65
- C 0.66
- D 0.67

☐

Answer

195. Calculate the profitability ratio for a product with a net profit margin of 12.5% on total sales of £978,060.

- A 87.5:1
- B 21:5
- C 7:1
- D 5:1

☐

Answer

196. If a company has current assets of £42,000 and current liabilities of £28,000, what is its working capital ratio (the relationship between current assets and current liabilities)?

- A 3:2
- B 4:2
- C 5:2
- D 6:2

☐

Answer

197. Divide 3 by 12.

- A 0.45
- B 0.35
- C 0.25
- D 0.15

☐

Answer

198. A journal is used to assign a transaction of £462 in the ratio 6:8. What is the value of the smaller part of the total?

- A £192
- B £194
- C £196
- D £198

Answer

199. Divide 16 by 64.

- A 0.25
- B 0.30
- C 0.35
- D 0.40

Answer

200. Calculate the price/earnings ratio for an investment of shares in a limited company if each share has a current market value of 300p and earnings in the current year after corporation tax of 60p.

- A 20:1
- B 15:1
- C 10:1
- D 5:1

Answer

End of test

# 5

## Two realistic data interpretation tests

This chapter comprises two realistic practice data interpretation tests. Answers and explanations are provided in Chapter 6 and an interpretation of your score in Chapter 7.

Data interpretation tests are fast becoming the most common style of numerical reasoning test. Almost every battery of graduate psychometric tests will include a data interpretation sub-test, and you are certain to face a test of this type at one or more points in your career. These tests require you to be competent in the key mathematical operations and to also demonstrate that you can reason with figures with or without a calculator. Even when you are allowed a calculator, a well-practised candidate will often be quicker without one and, importantly, will know if under the pressure of the test they have miskeyed a sum. So put the calculator away and undertake this practice without one!

To get the most of this practice material treat these tests as if they were the real thing. Remember that to do well in a psychometric test you have to try hard. So do your very best in test 4 and then set out to beat your score when you take test 5. That way you will create a real test feel and, if you succeed, prove to yourself that you have a winning strategy.

You will find more practice of this sort in *How to Pass Data Interpretation Tests* and *How to Pass Advanced Numeracy Tests* (revised edition), both published by Kogan Page.

## **Test 4: Data interpretation**

### **Test instructions**

This test comprises 30 questions and you should attempt to complete them in 25 minutes. To do well in this test you must avoid spending too long on any one question and work quickly and conscientiously. Each question is multiple choice, so you need to select one of the suggested answers as correct and write its corresponding letter of the alphabet into the answer box.

You should attempt these questions without a calculator and work without interruption.

Do not turn over the page until you are ready to begin.

1. Which of the following shares is the most 'expensive' as indicated by its price/earnings ratio?

Share	market price per share	earnings per ordinary share
1	320p	40p
2	630p	70p
3	500p	50p
4	390p	30p

Suggested answer

- A 1
- B 2
- C 3
- D 4

☐

Answer

## **Data set 1**

Read the two passages and answer the following seven questions by writing the answer in the box provided.

### **Passage 1**

One is 40 times more likely to be killed in an accident in the home than in a plane crash, yet safety in the home attracts only a fraction of the money spent on air safety. The chances of dying in an air crash are 1 in 500,000. Such statistics can provide a revealing picture of where money could be used to reduce accidents. Each year 3,900 deaths occur in the home as a result of an accident. Many of these could be prevented if more money was spent on accident prevention in the home.

### **Passage 2**

The Treasury values a life at £1.3 million for use in the cost-benefit calculation as to whether or not a safety improvement is worth the investment. A calculation is made as to how many lives it is believed a safety measure

will save and it is multiplied by the Treasury figure for the value of each life; the cost of the measure is then divided by that figure.

In practice, safety schemes seem to be approved using very different cost-benefit figures depending on the mode of transport or location of the accident. Safety schemes are approved for the air industry when the cost per life saved is less than £10 million. Road safety schemes in comparison receive far less funding even though 10 people a day die on our roads. A road safety scheme will fail to be implemented for reasons of cost when the cost per life saved is greater than £100,000. Figures for the cost-benefit intervention point for safety initiatives at home are hard to identify. What evidence there is, however, does suggest that the intervention figure is very low indeed.

2. If it was to cost £37 million to put down new anti-skid surfaces on all the high-speed bends in the road network, what is the minimum number of lives that would be expected to be saved if the proposal was to win approval?

A 3,900  
B more than 400  
C not less than 370  
D fewer than 360

☐

Answer

3. Use the Treasury value for life figure to calculate the annual cost to the nation of deaths caused by accidents in the home.

A 5 billion, 7 million  
B 5 billion  
C 70 million  
D 1.3 million

☐

Answer



4. What are the chances of dying in an accident in the home?

- A 1:12,000
- B 1:12,500
- C 1:13,000
- D 1:13,500

Answer

5. If safety initiatives could reduce the number of deaths on our roads by 20%, how many lives would be saved in a typical year?

- A 700
- B 710
- C 720
- D 730

Answer

6. What would be the percentage decrease in the number of deaths caused by accidents in the home if the number of fatalities fell by 234 in a year?

- A 6%
- B 7%
- C 8%
- D 9%

Answer

7. Which of the suggested answers is the best estimate of how many lives are lost in an average year through plane crashes?

- A 94
- B 96
- C 98
- D cannot tell

Answer

8. If a safety initiative was approved that would save 500 lives a year in the home at a total cost of 37.5 million, what would the cost–benefit intervention point be for safety initiatives at home?

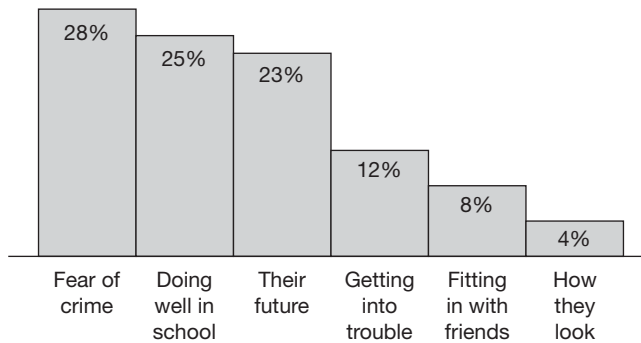
A 75,000  
B 750,000  
C 1.3 million  
D cannot tell



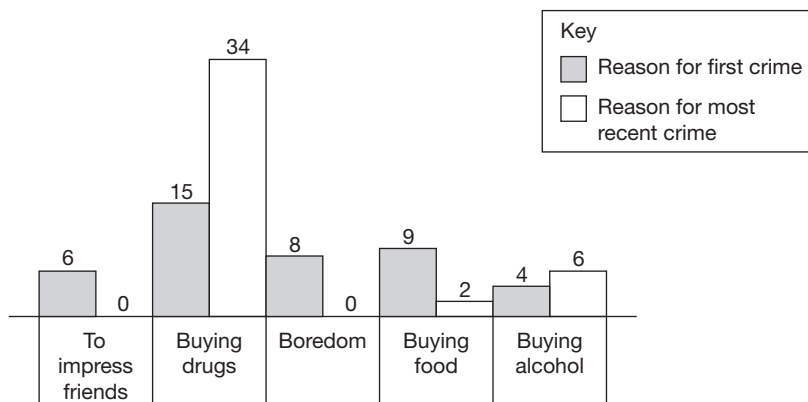
Answer

## Data set 2

Refer to figures 1 and 2 for these tests.



**Figure 1** Youth concerns: What concerns 660 young people most



**Figure 2** The reason given by 42 young people convicted of more than one crime involving property

9. If the sample size of the youth concerns survey was increased to 2,000 and the percentage responses were found to be the same, how many MORE young people would you expect to be most concerned about getting into trouble?

A 240  
B 161  
C 149  
D cannot tell

Answer

10. According to the figures, how many young people were most concerned with a fear of crime and getting into trouble?

A 267  
B 246  
C 265  
D 264

Answer

11. Which reason given for committing a crime saw the greatest percentage increase between the first and most recent crime?

A impress friends  
B funding drug use  
C to buy food  
D to buy alcohol

Answer

12. What percentage of young people said that the reason for committing their first crime was boredom? (Express your answer to the nearest whole-number percentage.)

A 17%  
B 18%  
C 19%  
D 20%

Answer

13. Estimate the ratio between children most concerned with their future or doing well at school compared with those most concerned with getting into trouble.

A 4:1  
B 5:1  
C 6:1  
D 7:1

Answer

14. If in the same survey the previous year there were 30% fewer respondents and doing well in school was stated by 66 of them to be their most pressing concern, what percentage of respondents that year gave this response? (Round your answer up to the nearest whole-number percentage.)

A 11%  
B 12%  
C 13%  
D 14%

Answer

15. In total how many responses did the researchers who undertook the surveys obtain from the young people?

A 752  
B 744  
C 702  
D cannot tell

Answer

## **Data set 3**

### **Manufacturing costs for the production of 50 television (TV) sets**

Direct materials	£1,500
Direct labour	£750
Factory overheads	£3,500
Total factory cost for 50 TV sets	£5,750
Recommended selling price to retailers per set	£128.8

TV sets sold (million)	2.7	2.1	1.2
year	2007	2008	2009

**TV viewing habits (hours spent watching TV in a typical week)**


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Hrs of viewing	No of viewers
20–24	200
25–29	600
30–34	900
35–39	400

---

16. 70% of sales in 2007 and 2009 occurred in the EU and US territories, how many more TV sets were sold into these territories in 2007 than in 2009?

A 1.03m  
 B 1.04m  
 C 1.05m  
 D cannot tell

Answer

17. Use the figures provided to calculate the total factory cost of producing all the TV sets sold in 2008.

A 241.5m  
 B 240m  
 C 235.5m  
 D cannot tell

Answer

18. From the table, calculate the absorption cost of each TV set (absorption cost = total factory cost divided by the number of units produced).

A £115  
 B £116  
 C £117  
 D £118

Answer

19. Calculate the marginal cost of each TV set (marginal cost = direct material and labour cost divided by number of units produced).

- A £46
- B £45
- C £44
- D £43

Answer

20. What is the percentage profit/loss made on each TV set (use absorption cost in this calculation)?

- A 9%
- B 10%
- C 11%
- D 12%

Answer

21. By how much would total profits increase or fall in relation to the profit made on 50 sets sold at the recommended selling price if 50 more sets were produced (at marginal cost) without incurring any increase in factory overheads and all 100 sets were sold to retailers at £89?

- A increase by 200
- B increase by 205
- C increase by 210
- D increase by 215

Answer

22. What would the percentage profit be on 50 sets priced at absorption cost and 50 at marginal cost if all 100 sets were sold at £91.20?

- A 14%
- B 15%
- C 16%
- D 17%

Answer

23. What fraction of viewers watch TV the average number of hours or more?

- A 11/21
- B 13/21
- C 14/21
- D cannot tell

Answer

## Data set 4

### Call Up Telecommunications – latest yearly results, 2005

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Group turnover £4.6 bn  
Pre-tax profit up £549 m  
Earnings per share at 4.8p  
Share price £2.64

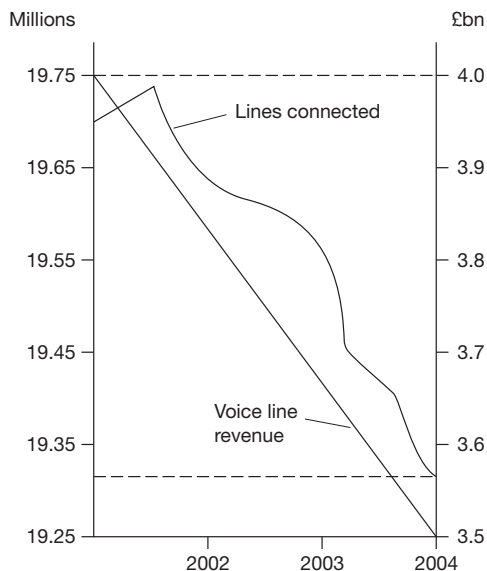
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24. From the table, what is the price/earnings ratio of shares in Call Up Telecommunications?

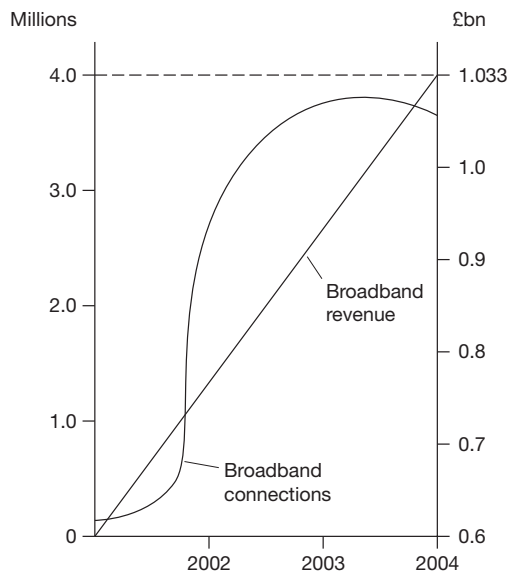
- A 40:1
- B 45:1
- C 50:1
- D 55:1

Answer





**Figure 3** Fixed lines have declined



**Figure 4** Broadband has soared

Note: group turnover = total revenue from voice and broadband.

25. At a point in 2002, Call Up Telecommunications provided 19.75 million fixed lines. This figure is projected to fall to 18.96 million. What is this change expressed as a percentage decrease?

A 2%  
B 3%  
C 4%  
D 5%

Answer

26. From the diagram, how much has broadband services turnover increased from its 2002 figure of £661.12 m? (Express your answer as a percentage.)

A 36%  
B 37%  
C 38%  
D 39%

Answer

27. If the next year's earnings per share were 4.08p, by what percentage will share earnings have decreased?

A 16%  
B 15%  
C 14%  
D 13%

Answer

28. What was the net effect on revenue of the decline in fixed line revenue and the increase in broadband revenue over the period covered? (Round your answer to the nearest 0.1£bn.)

- A +£0.5bn
- B Nil
- C -£0.1bn
- D -£0.2bn

Answer

29. How much did turnover go down between 2004 and 2005?

- A 0.067 bn
- B 0.065 bn
- C 0.063 bn
- D cannot tell

Answer

30. Use figure 3 and the table below to identify the best estimate for the percentage increase in broadband connections between 2002 and 2003.

Year	Broadband connections	Voice connections
2002	2.9m	19.65m
2004	3.6m	19.55m

- A 124%
- B 125.5%
- C 127.5%
- D 129.5%

Answer

End of test

## **Test 5: Data interpretation**

### **Instructions**

This test comprises 30 questions and you should attempt them in 25 minutes. To do well in this test you must avoid spending too long on any one question and work quickly and conscientiously. Each question is multiple choice, and you need to select one of the suggested answers as correct and write its corresponding letter of the alphabet into the answer box.

You should attempt these questions without a calculator and work without interruption.

Do not turn over the page until you are ready to begin.

1. 462 people were asked to identify their favourite colour, food and city. 420 responded, with 120 indicating red, 300 curry and 21 London. What fraction gave the response London?

- A  $\frac{1}{22}$   
B  $\frac{1}{20}$   
C  $\frac{1}{10}$   
D  $\frac{1}{5}$



Answer

## Data set 1

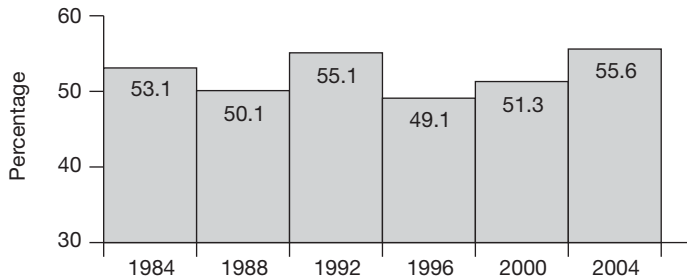
### The pink and blue candidates election

Most important issue	Cited as main issue	Pink candidate	Blue candidate
Economy	20%	18%	80%
Security	19%	86%	14%
Health	8%	22%	78%
Taxation	5%	56%	44%
Education	4%	25%	75%
No reason given	15%		

Demographic breakdown	Pink	Blue
Men	55%	45%
Women	48%	52%
White	57%	52%
African-Americans	11%	89%
Latino	42%	55%

Education	Pink	Blue
No university degree	52%	47%
University degree	48%	50%

All figures based on exit poll of 5,000 men and 5,000 women.



**Figure 5** Voter turnout

2. If the country to which the voter turnout figure refers has a population of 3 million, calculate how many people voted in 2004.

A 55.6%  
B 56%  
C 56.6%  
D Cannot tell

Answer

3. Which election saw the largest percentage decrease in turnout relative to the previous election?

A 1988  
B 1992  
C 1996  
D 2000

Answer

4. What percentage of respondents cited a reason other than those listed for their decision as to how they were to vote?

A 26%  
B 27%  
C 28%  
D 29%

Answer

5. How many respondents said that they voted for the pink candidate?

A 5,150  
B 5,050  
C 2,750  
D cannot tell

Answer

6. What is the ratio of support for the pink and blue candidates on the issue of education and tax combined among respondents who cited these issues as their main reason for deciding how they voted?

A 17:27  
B 19:26  
C 18:25  
D cannot tell

Answer

7. What percentage of all respondents were university graduates?

A 48.79%  
B 48.88%  
C 48.97%  
D cannot tell

Answer

8. If in 1992 for every vote counted 1 in 40 were spoiled (voters sometimes do this to register a protest), how many spoiled voting slips should the official in charge expect to find at a voting station with 44,080 registered voters?

- A 607
- B 608
- C 609
- D cannot tell



Answer

## Data set 2

### Customer satisfaction with franchise and independent garages

---

Twenty-seven per cent of garages were found to be good or very good. More than two-thirds of garages failed to spot dangerous defects when servicing cars.

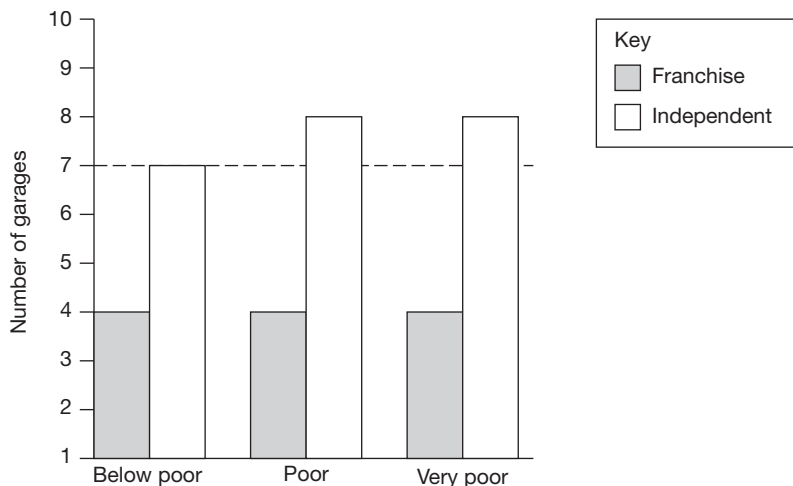
A quarter carried out unnecessary work to increase the bill. Faults were missed by 67%.

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These were among the findings of a mystery shopper survey in which 48 cars with known faults were booked in for a service in 48 garages (20 franchises of national chains and 28 independent).

Significant differences in the amount charged were also found. Franchised garages were far more expensive, charging an average of £282 for the same service for which independent garages charged an average of £120.





**Figure 6** Quality of service

9. If the average charge of franchised garages was to increase by  $2\frac{1}{2}\%$  and the average charge of independent garages was to increase by £12, how much more expensive than independent garages would franchised garages become?

A £156.05  
 B £157.05  
 C £158.05  
 D £159.05

Answer

10. How many garages were classed as good or very good?

A 13  
 B 15  
 C 17  
 D 20

Answer

11. How many independent garages were classed as below poor or worse?

- A 16
- B 20
- C 23
- D 25

Answer

12. What is the mean amount charged for a service?

- A £186.00
- B £186.50
- C £187.00
- D £187.50

Answer

13. What was the ratio of franchised garages classed as very good or good compared with below poor or worse?

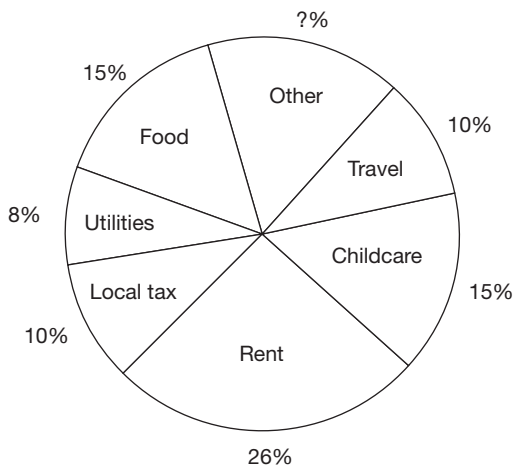
- A 3:5
- B 2:3
- C 2:5
- D 3:7

Answer

14. What is the percentage of franchised garages classed as either below poor or worse?

- A 60%
- B 61%
- C 62%
- D 63%

Answer



**Figure 7** The breakdown of average monthly expenditure for a family

15. Calculate from the figure what percentage of the family's expenditure is on 'other'?

- A 19%
- B 18%
- C 17%
- D 16%

Answer

16. Approximately what fraction of the family's monthly expenditure do utilities, rent and food represent?

- A  $\frac{3}{5}$
- B  $\frac{1}{2}$
- C  $\frac{3}{7}$
- D  $\frac{5}{12}$

Answer

17. The family's monthly rent used to be  $\times 3.25$  more than the total spend each month on utilities, however, the cost of utilities has increased greatly and now the family spend 10% of their monthly income on utilities alone. How much does the family now spend on utilities compared with rent (which has remained unchanged)?

A Rent now equated to 2.6 times the monthly sum spent on utilities  
B Rent now equates to 2.4 times the monthly sum spent on utilities  
C Rent now equates to 2.2 times the monthly sum spent on utilities  
D cannot tell

Answer

18. If the family spends £116 on utilities, how much is the family's total expenditure?

A £1,550  
B £1,500  
C £1,450  
D £1,400

Answer

19. If a flat rate of tax at 25% is paid on all income and the family earns net of tax £1,800, how much is its gross income?

A £2,400  
B £2,350  
C £2,300  
D £2,250

Answer

20. Other expenditure comprises savings, entertainment and luxury items, which are spent in the ratio 3 : 4 : 1. Calculate how much the family saves each month if monthly income is £2,400.

A £142  
B £143  
C £144  
D £145

Answer

21. When the eldest child in the family starts school, the family will save 33% of the current childcare expenditure. What is this saving as a percentage change on the monthly total income? (If the question cannot be answered, record CNT in the answer box.)

A 4.95% decrease  
B 5% decrease  
C 5.05% increase  
D 5.10% increase

Answer

22. If the total annual expenditure was £15,000 how many types of expenditure would be £187.50 or more a month?

A 3  
B 4  
C 5  
D Cannot tell

Answer

## Data set 4

### Incoming tourism

---

7% of the UK's total workforce is employed in tourism.

24.4 million overseas visitors came to the UK in 2004.

2004 was a record year for inbound tourism.

This level of visitors was 3% higher than in 2003.

It eclipsed the previous record of 24 million visitors recorded in 1998.

In 2004 while in the UK the average overseas visitor spent £110.

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### Average daily spend per visitor (£)

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2003	£60
2004	£76.20

---

23. What percentage increase in daily average spend occurred between 2003 and 2004?

- A 27%
- B 26%
- C 25%
- D Cannot tell

Answer

24. How many visitors came to the UK in 2003?

- A 23.660m
- B 23.668m
- C 23.700m
- D 23.760m

Answer

25. What was the approximate percentage increase on the previous record number of visitors?

- A 1.3%
- B 1.4%
- C 1.5%
- D 1.6%

Answer

26. In total, how much did the inbound tourists contribute to the UK's GDP?

- A 26.71bn
- B 26.76bn
- C 26.84bn
- D 26.80bn

Answer

27. If there are 30m people employed in the UK workforce, how many work in the tourism sector?

- A 2.2m
- B 2.1m
- C 2.0m
- D 1.9m

Answer

28. Expenditure by visitors to the UK represents 4% of the UK's total GDP. How much is the total GDP?

- A 698bn
- B 699bn
- C 670bn
- D 671bn

Answer

29. Visitors in 2004 stayed for an average of 3 days. Estimate the total spend of overseas visitors in 2004.

- A £5bn
- B £5.5bn
- C £6bn
- D £6.5bn

Answer

30. Estimate the number of employers in the tourism industry if the UK workforce totals 36m and the average employer in tourism employs 18 people.

- A 180,000
- B 160,000
- C 140,000
- D 120,000

Answer

End of test



# 6

## Answers and many detailed explanations

### Test 1: Graduate personality questionnaire

1. Interpretation: If you agree with this statement then it may be taken to demonstrate financial acumen. To agree strongly might suggest someone who is risk sensitive. Consider question 69 for consistency of responses.
2. Interpretation: A positive response suggests a confident candidate able to work without supervision. See questions 21, 39, 63 and 84 for consistency.
3. Interpretation: Agreement might suit a candidate for a complex, fast-changing role. Too strong a response could lead an employer to conclude that a candidate risks being over-confident but this would depend on the position. Consider questions 11, 33 and 68 for consistency.
4. Interpretation: A positive response suggests a focused working style; disagreement might suggest a proactive, strategic approach. Consider questions 77, 87 and 93 for consistency.
5. Interpretation: A negative response could be interpreted as a strongly focused or reactive working style. Agreement might suggest a proactive approach. See questions 19, 31 and 45 for consistency.
6. Interpretation: Agreement suggests an eye for detail and a meticulous working style. Consider questions 14, 20, 36, 60, 85 and 96 for consistency.

7. Interpretation: Strong agreement would be appropriate if applying for a role that requires the holder to show sensitivity to the needs of others. See questions 18, 32, 44, 52 and 70 for consistency.
8. Interpretation: Agreement suggests a pragmatic approach to work. Disagreement might be expected from a candidate applying to a position that is strategic or involves policy formulation. Consider questions 17 and 46 for consistency.
9. Interpretation: Someone in it for the long term may be more inclined to set procedures and systems that endure and might be expected to agree with this statement. Consider questions 22, 41, 61, 74, 113, 122 and 130 for consistency.
10. Interpretation: Strong agreement suggests suitability for a management role where interpersonal and motivational skills are essential. Strong agreement would not be so important in a role that does not depend on the motivation of others. Consider questions 42, 107, 119 and 126 for consistency.
11. Interpretation: Agreement would suggest a confident approach in a complex or fast-changing environment. Disagreement might suggest a recognition of the importance of strategy and procedures. Consider questions 3, 33 and 68 for consistency.
12. Interpretation: Disagreement would suggest someone best suited to a leadership role that involves policy formation. Agreement might suggest someone with a hands-on, down to earth approach. Consider questions 27, 54, 73 and 94 for consistency.
13. Interpretation: Agreement will suit a networking, client-facing role. Consider questions 51, 82, 110, 121 and 128 for consistency.
14. Interpretation: Agreement suggests a strong eye for detail and high standards of presentation. Strong agreement might not suit an organization that prioritizes results rather than method. See questions 6, 20, 36, 60, 85 and 96 for consistency.
15. Interpretation: Agreement suggests a candidate suitable for a role that requires an ambitious, results-focused person. Consider questions 35, 47, 58, 81, 117 and 125 for consistency.
16. Interpretation: Strong agreement might be expected of a modern thinker in a fast-developing industry. Consider questions 46, 108 and 114 for consistency.

17. Interpretation: Many organizations state that the post holder will be pragmatic, and agreement with this statement would suggest that attribute. Consider questions 8 and 46 for consistency.
18. Interpretation: Some industries might expect strong agreement while others might prefer agreement but not strong. For example, a role that requires the post holder to show sensitivity to others might best suit a strong response.
19. Interpretation: A positive response suggests a proactive or risk-sensitive approach to work. Consider questions 5, 35, 45, 71, 62 and 100 for consistency of answer.
20. Interpretation: Agreement suggests a numerate applicant.
21. Interpretation: Agreement suggests suitability to a role that involves working without daily supervision. See questions 2, 39, 63 and 84 for consistency.
22. Interpretation: Strong agreement would suggest a safe pair of hands. Consider questions 9, 41, 61, 74, 113, 122 and 130.
23. Interpretation: Agreement would suggest a manager or leader who relied on inspiration and charisma. Consider questions 49 and 106 for consistency.
24. Interpretation: Agreement suggests a motivated, hands-on manager, and some employers are looking for exactly that. Consider questions 50 and 105 for consistency.
25. Interpretation: Agreement might suggest a candidate suitable for a role in which they must operate as an agent for change. See questions 67 and 104 for consistency.
26. Interpretation: Agreement suggests a candidate suitable for a customer-facing role and a sales-orientated, ambitious candidate. Consider questions 82, 110 and 121 for consistency.
27. Interpretation: Agreement suggests a need to know the bigger picture and to be involved in policy. See questions 12, 54, 73 and 94 for consistency.
28. Interpretation: Strong agreement would suggest a mature (in the non-ageist sense) approach and a candidate who would represent a safe pair of hands. If this is a part of your character that you wish to emphasize then see questions 57, 78, 115 and 118 for consistency.
29. Interpretation: Agreement suggests a candidate well suited for a team role. See questions 102, 109, 116 and 123 for consistency.

30. Interpretation: Agreement would support a candidate for a role in an organization that required independence but otherwise it could suggest a candidate who would find it difficult to fit most teams. See questions 38, 76 and 91 for consistency.
31. Interpretation: Agreement suggests a strong preference for working proactively. See questions 5, 19 and 45 for consistency.
32. Interpretation: Strong agreement suggests an applicant capable of being sensitive to the needs of others. See questions 7, 18, 44, 52 and 70 for consistency.
33. Interpretation: Disagreement would suggest a candidate suitable for working in a fast-changing, complex role. See questions 3, 11 and 68 for consistency.
34. Interpretation: Strong agreement would suggest a preference for a professional role within an organization. See questions 48, 53, 66 and 99 for consistency.
35. Interpretation: Agreement will suggest an ambitious candidate determined to make an impression. It will appeal to some employers but might put others off. Consider questions 15, 47, 58, 81, 117 and 125 for consistency.
36. Interpretation: Strong agreement suggests someone who works in a meticulous style and values accuracy. See questions 6, 14, 20, 60, 85 and 96 for consistency.
37. Interpretation: Strong agreement might suggest suitability for a performance-oriented role. Consider questions 90 and 92 for consistency.
38. Interpretation: Agreement would be appropriate for a candidate applying for a role that required the provision of independent advice. See questions 30, 76 and 91 for consistency.
39. Interpretation: Essential to agree if applying to many graduate roles, especially if they involve working independently of a supervisor or manager. Consider questions 2, 21, 63 and 84 for consistency.
40. Interpretation: A negative response may indicate someone who is strongly sales orientated, a change facilitator or suitable for a role where the status quo has to be challenged. See questions 1, 71 and 100 for consistency of response.

41. Interpretation: Strong agreement suggests an uncompromising commitment to procedure. Consider questions 9, 22, 74, 113, 122 and 130 for consistency.
42. Interpretation: Some organizations will value a strong commitment to this motivational approach. Consider questions 10, 107, 119 and 126 for consistency.
43. Interpretation: Unless you are applying to work as an electrician or handy person, agreement might imply an approach best suited to a hierarchical place of work and a degree of inflexibility.
44. Interpretation: In some roles and industries this is the only acceptable approach and if you are applying to such an area then you must reflect that culture in your answers. See questions 7, 18, 32, 52 and 70 for consistency.
45. Interpretation: Strong agreement indicates a proactive, wide-view approach; a negative response may suggest a focused, reactive approach. For consistency of answer consider questions 31, 19 and 5.
46. Interpretation: A modern thinker and dynamic business developer would agree strongly with this statement. See questions 16, 108 and 114 for consistency.
47. Interpretation: Disagreement would suggest a team player, agreement an ambitious, performance-oriented candidate. For consistency on the issue of ambition see questions 15, 35, 58, 81, 117 and 125.
48. Interpretation: Agreement strongly suggests a professional and independent role within an organization. See questions 34, 53, 66 and 99 for consistency.
49. Interpretation: Agreement implies an inspirational style of management or leadership. Consider questions 23 and 106 for consistency.
50. Interpretation: Agreement implies a very hands-on approach to management and perhaps strong agreement would suggest a lack of trust in colleagues.
51. Interpretation: This quality is relevant to internal management as well as networking-relationship-type customer-facing roles. In the latter case consider questions 13, 26, 82, 110, 121 and 128 for consistency.
52. Interpretation: A negative response would suit a role in which the post holder must show sensitivity to the needs of others but in some

- roles a positive response may be seen as a virtue. See questions 7, 18, 32, 44 and 70 for consistency.
53. Interpretation: A positive response is relevant to a professional and/or leadership role. Some organizations might find strong agreement to imply a candidate who might not fit well into an existing team. See questions 34, 48, 66 and 99 for consistency.
54. Interpretation: Agreement suggests a policy formulator or someone who prefers a workplace with procedures. See questions 12, 27, 73 and 94 for consistency.
55. Interpretation: Agreement suggests an entrepreneur who might be well suited for a business development position. See questions 103, 112, 120 and 129 for consistency.
56. Interpretation: Agreement will suggest a candidate suitable for a sales-orientated role. See questions 101, 111, 124 and 127 for consistency.
57. Interpretation: Strong agreement would suggest a mature approach and a safe pair of hands. See questions 28, 78, 115 and 118 for consistency.
58. Interpretation: Agreement suggests an ambitious candidate with considerable confidence in his or her potential. It might be most appropriate to agree with this statement if you are applying for a commission-based role.
59. Interpretation: Agreement might suggest someone who sees themselves as an all-rounder. See questions 72, 79, 88 and 97 for consistency.
60. Interpretation: Agreement suggests a meticulous approach and an eye for detail. See questions 6, 14, 20, 36, 85 and 96 for consistency.
61. Interpretation: A strong response suggests an independent, uncompromising, reliable candidate. See questions 9, 22, 41, 74, 113, 122 and 130 for consistency.
62. Interpretation: Agreement may indicate a preference for a financial position and someone risk sensitive. See questions 40, 71 and 100 for consistency.
63. Interpretation: If the role for which you are applying involves working without supervision then only a strong positive response would be acceptable. See questions 2, 21, 39, 43 and 84 for consistency.
64. Interpretation: Strong agreement suggests a reactive style. Some businesses are seeking highly reactive staff but make sure you are

- applying to such an organization before you stress this side of your personality. See questions 75, 83, 89 and 98 for consistency.
65. Interpretation: Agreement suggests a pragmatic approach to work. See questions 8, 17 and 46 for consistency.
66. Interpretation: A positive response suggests a professional approach. See questions 34, 48, 53 and 99 for consistency.
67. Interpretation: Agreement suggests someone suitable for a role as an agent of change. See questions 25 and 104 for consistency.
68. Interpretation: Agreement might suggest that the person would excel in complex and fast-changing environments. A negative response might be preferred by an organization operating in a rule-bound, regulatory environment. See questions 3, 11 and 33 for consistency.
69. Interpretation: This side is concerned with trade accounts payable, debts and equity. A positive response shows financial acumen; a strong response shows preference for financial positions. See question 1 for consistency of response.
70. Interpretation: Agreement may be an appropriate response for some roles but a negative response would be required in any that requires sensitivity to the needs of others. See questions 7, 18, 32, 44 and 52 for consistency.
71. Interpretation: A positive response may indicate a person who is risk sensitive and suited to a role where a counterbalance to a strong sales ethos is required. See questions 1, 40 and 100 for consistency.
72. Interpretation: Agreement suggests a candidate suitable for an all-rounder type of role; disagreement might suggest someone more suited for a role that demands focus. See questions 59, 79, 88 and 97 for consistency.
73. Interpretation: Strong agreement suggests a candidate with a preference for policy and its formulation. See questions 12, 27, 54 and 94 for consistency.
74. Interpretation: Strong agreement suggests a very reliable person who can be trusted to get on with a task. See questions 9, 22, 41, 61, 113, 122 and 130 for consistency.
75. Interpretation: Agreement suggests a reactive style of management. See questions 64, 83, 89 and 98 for consistency.

76. Interpretation: Agreement would suggest a strongly independent approach and might suit some professional roles. See questions 30, 38 and 91 for consistency.
77. Interpretation: A positive response suggests a focused style of working. See questions 4, 87 and 93 for consistency.
78. Interpretation: Strong agreement might appeal to an employer looking for a mature approach in a candidate. Consider questions 28, 57, 115 and 118 for consistency.
79. Interpretation: Strong agreement would suggest someone suitable for another position that is highly flexible and broad. See questions 59, 72, 88 and 97 for consistency.
80. Interpretation: Agreement might suggest someone who is not a team player. See questions 29, 102, 109 and 123 for consistency on that issue; see also questions 107, 115, 119 and 126.
81. Interpretation: Agreement would suggest an ambitious candidate who placed great emphasis on performance. For consistency consider questions 15, 35, 47, 58, 117 and 125.
82. Interpretation: Agreement supports a candidate as suitable for a client-networking role. Consider questions 13, 26, 51, 110, 121 and 128 for consistency.
83. Interpretation: A strong response risks implying a certain lack of foresight; however, it would also suggest a very reactive style, which is by no means necessarily a bad thing. See questions 64, 75, 89 and 98 for consistency.
84. Interpretation: A negative response would better suit someone in a role where they had responsibility or worked unsupervised. A better response would involve reporting the problem immediately while working to put it right. For consistency of answer see questions 2, 21, 39, 43 and 63.
85. Interpretation: Agreement implies an eye for detail and an uncompromising approach to accuracy. See questions 6, 14, 20, 36, 60 and 96 for consistency.
86. Interpretation: Few employers would want in a position of responsibility someone who agreed with this statement. When the news is bad, report it straight away, taking the opportunity to explain what is being done to correct it.



87. Interpretation: Disagreement might support the view that the candidate is more strategic a policy formulator, perhaps. Agreement suggests a focused work style. See questions 4, 77 and 93 for consistency.
88. Interpretation: A positive response suggests a person suited to an all-rounder type of position. See questions 59, 72, 79 and 97 for consistency.
89. Interpretation: Agreement suggests that success in business requires a reactive approach. See questions 64, 75, 83 and 98 for consistency.
90. Interpretation: Strong agreement might be expected of a candidate for a commission-based, target-driven role. See questions 37 and 92 for consistency.
91. Interpretation: Strong agreement would suit an independent role or professional position within an organization. See questions 30, 38 and 76 for consistency.
92. Interpretation: Strong disagreement might indicate a preference for performance-orientated roles. See questions 37 and 90 for consistency.
93. Interpretation: Disagreement might suggest a candidate sensitive to the needs of others; a positive response might suggest someone highly focused and driven. See questions 4, 77 and 87 for consistency.
94. Interpretation: Agreement suggests a candidate best suited for a role that affords strategic awareness. See questions 12, 27, 54 and 73 for consistency.
95. Interpretation: Agreement might suggest a candidate who is hard to manage.
96. Interpretation: Agreement suggests a hands-on management style and a liking for detail. See questions 6, 14, 20, 60 and 85 for consistency.
97. Interpretation: Some employers are looking for flexible, multitasked staff; others prefer specialists. A positive response would suggest the candidate is an all-rounder while a more negative response would imply a person better suited for a task-defined role. See questions 59, 72, 79 and 88 for consistency.
98. Interpretation: Strong agreement might suggest a lack of foresight and a highly reactive style. For some positions a reactive style is exactly what is being looked for. See questions 64, 75, 83 and 89.
99. Interpretation: A strong response would suggest a professional role or one where the candidate is required to bring stature. See questions 34, 48, 53 and 66.

100. Interpretation: A positive response may indicate someone who is risk sensitive; a strongly negative response may indicate someone who is sales driven or a change facilitator. See questions 1, 40 and 71 for consistency of answer.
101. Interpretation: Agreement suggests a candidate well suited to sales positions. Consider questions 56, 111, 124 and 127 for consistency.
102. Interpretation: Agreement suggests people skills and suitability for a team-player role. Consider questions 29, 109, 116 and 123 for consistency.
103. Interpretation: Strong agreement should be supported by your CV and indicates an entrepreneur. Consider questions 55, 112, 120 and 129 for consistency.
104. Interpretation: This is a well-known analogy for entirely changing a business without interrupting trade. Agreement would therefore suggest a candidate suitable for a role of agent of change. See questions 25 and 67 for consistency.
105. Interpretation: Strong agreement would suggest a hands-on leadership or management style. See questions 50 and 24 for consistency.
106. Interpretation: Agreement would suggest a candidate suitable for a leadership role where an inspirational style was sought. See questions 23 and 49 for consistency.
107. Interpretation: Strong agreement suggests preference for a style of team motivation and management preferred by some organizations. Consider questions 10, 42, 119 and 126 for consistency.
108. Interpretation: Strong agreement would be evidence of a flexibility of mind and working approach that some employers value highly. See questions 16, 48 and 114 for consistency.
109. Interpretation: Strong agreement will support the view that a candidate is sensitive to the needs of colleagues and a team player. Consider questions 29, 102, 116 and 123 for consistency.
110. Interpretation: A negative response will strongly suggest that you are better suited to back-office roles. If you agreed with the statement then consider questions 13, 26, 51, 82, 121 and 128 for consistency.
111. Interpretation: Agreement indicates a strong sales orientation in the candidate. See questions 56, 101, 124 and 127 for consistency.

- 112. Interpretation: Agreement would mean that the candidate had proven influencing skills and an aptitude for business development. See questions 55, 103, 120 and 129 for consistency.
- 113. Interpretation: Agreement suggests someone who can be relied on to continue the operation of a successful formula rather than shape the future. See questions 9, 22, 41, 61, 74, 122 and 130 for consistency.
- 114. Interpretation: A candidate with an open mind and flexible working style might agree with this statement. See questions 16, 46 and 108 for consistency.
- 115. Interpretation: Agreement would need to be supported by a CV and it would suggest a low-risk appointment.
- 116. Interpretation: Agreement suggests a team player. See questions 29, 102, 109 and 123 for consistency.
- 117. Interpretation: Agreement suggests an ambitious, determined individual who will suit the culture of some organizations but not all. Consider questions 15, 35, 47, 58, 81 and 125 for consistency.
- 118. Interpretation: Disagreement suggests a candidate that may come over as a little cynical.
- 119. Interpretation: Strong agreement suggests a team player who can lead a motivated group in a no-blame culture. Consider questions 42, 107 and 126 for consistency.
- 120. Interpretation: An entrepreneur and candidate suitable for a business development role would agree with this statement. See questions 55, 103, 112 and 129 for consistency.
- 121. Interpretation: Strong agreement suggests a networking or similar role. Consider questions 13, 26, 51, 82, 110 and 128 for consistency.
- 122. Interpretation: Agreement suggests a safe pair of hands that will keep things steady. See questions 9, 22, 41, 61, 74, 113, 130 for consistency.
- 123. Interpretation: Agreement suggests a non-confrontational approach to work and a strong team player. Consider questions 29, 102, 109 and 126 for consistency.
- 124. Interpretation: Agreement suggests an ambitious sales-orientated candidate. See questions 56, 101, 111 and 127 for consistency.

- 125. Interpretation: Agreement demonstrates ambition and self-belief – qualities of yours worth stressing if that is what the organization is looking for. Consider questions 15, 35, 47, 58, 81 and 117 for consistency.
- 126. Interpretation: Strong agreement suggests a candidate who knows the value of motivating others. Consider questions 10, 42, 107 and 119 for consistency.
- 127. Interpretation: Strong agreement might suggest a confident, ambitious, sales-orientated person. See questions 56, 101, 111 and 124 for consistency.
- 128. Interpretation: Agreement suggests suitability for a client-facing networking role. Consider questions 13, 26, 51, 82, 110 and 121 for consistency.
- 129. Interpretation: Agreement suggests a willingness to take risks and perhaps an entrepreneurial style. Consider questions 55, 103, 112 and 120 for consistency.
- 130. Interpretation: If you agree strongly then you are telling an employer that you are a safe pair of hands. See questions 9, 22, 41, 61, 74, 113 and 122 for consistency.

## **Test 2: Analysis of information**

- 1. A, True  
The passage states that existing fuels should be made to go further.
- 2. B, False  
It is stated that substantial avoidable waste also occurs in factories and to a lesser extent transport. It is false therefore to conclude that the opportunity exists mainly in the domestic sector.
- 3. C, Cannot tell  
The passage recommends greater effort but it does not comment on whether that effort will be made.

4. A, True  
This can be inferred from the passage, as it reports that the market has since dipped.
5. C, Cannot tell  
Profits were reported at 50% ahead. The passage states that the average selling price was strongly ahead but no percentage is given, nor can it be inferred.
6. B, False  
The passage states that consumer confidence has dropped and from this we can infer that they are less optimistic.
7. B, False  
Girls are more prone by a ratio of 3 to 1.
8. C, Cannot tell  
This information is not contained in the passage and cannot be inferred from the passage.
9. A, True  
It is stated in the passage that the higher incidence of infestation among girls is related to the fact that their play involves longer periods of head contact. From this we can infer that prolonged contact of heads can lead to a child contracting head lice.
10. A, True  
The passage states that given the shortage these central banks have decided they have no alternative but to withdraw the coins.
11. C, Cannot tell  
The passage does not state whether or not there is a shortage in France. There may well be such a shortage; however, that there is a shortage cannot be inferred from the passage.
12. B, False  
The one- and two-cent coins will remain in circulation at least in France.

13. A, True

This point is clearly stated in the passage.

14. C, Cannot tell

The passage only reports on a fall in the level of homelessness in London. The experience for Britain as a whole cannot be inferred.

15. B, False

The passage notes differences between the cities but no case is made as to why a comparison between the cities is reasonable.

16. A, True

The statement's truth follows from the fact stated that the vast majority of respondents in the survey were opposed to the extension. It can therefore be expected that the opposition may continue.

17. A, True

The passage states that the zone is to be extended to these thickly populated areas in which many people will qualify for residential discounts.

18. B, False

Residents of the extended area will become eligible for the residents' discount and this risks a potential revenue drop for the scheme. From this it can be inferred that they currently have to pay the full charge.

19. A, True

While the passage does not report the respondents' view on these matters, it is possible that they were of this view.

20. A, True

The passage states that there have been four successive increases.

21. C, Cannot tell

We are told that the cost since 1997 has more than doubled and that the bill in some towns has risen by more than £10,000. But from this we cannot infer the cost of this tax on a house purchased that year.

22. B, False

The passage states that the highest band of 4% applies to properties over half a million, and the percentage figure for the lower band, while not given, will be lower than 4%.

23. C, Cannot tell

The cost of controlling the current plague is not stated and cannot be inferred from the passage.

24. B, False

The passage does not state that donors have been asked to provide \$15 million; this figure relates to the amount released by the United Nations to assist eradication.

25. A, True

The passage states that last month hundreds of swarms were reported and crops devastated. The ground when stripped of everything green is also sown with eggs that hatch after 30 days. It is true, therefore, that the next generation of locusts is due to hatch.

26. B, False

It asserts a fact that could be tested.

27. B, False

While Spanish-speaking Americans are now the largest ethnic minority group, that does not mean that Spanish is the most widely spoken minority language.

28. C, Cannot tell

The size of the Latino population in relation to the overall population of the United States is not detailed in the passage and cannot be inferred from it.

29. C, Cannot tell

This information is neither provided nor can it be inferred.

30. B, False

The growth is due mainly to this but also the passing of the SARS crisis.

31. A, True

The economy is 12.5% higher this year than in the same period last year.

32. A, True

The passage describes the United States as the only industrialized nation due to experience significant population growth.

33. A, True

Britain is described as an industrialized nation and the United States as the only industrialized nation that will experience significant growth.

34. C, Cannot tell

The passage only provides information on the relative population sizes in 25 years' time. No information is provided about the current relative sizes. We cannot, then, infer the truth or falsehood of the statement.

35. A, True

This statement's truth is implied by the content of the passage. All stations could receive the information at the same time, either early or when the markets open.

36. B, False

Information about audience numbers is share-price sensitive and the share value may go either up or down whatever the change in audience levels. It is false, therefore, that the share price will go down as it is possible that it will rise if, for example, the drop in audience is less than the market had already adjusted for.

37. B, False

The passage contains statements in support of both the status quo (where public channels receive the information 12 hours before commercial stations) and the early release of the information to both types of station.



38. A, True

A flash flood occurs when heavy rain falls over geographic features such as steep-sided valleys.

39. C, Cannot tell

A downpour of 50 millimetres over a kilometre is described as not rare. The frequency of a downpour of 15 centimetres is not quantified and cannot be inferred from the passage.

40. B, False

The passage states that flash floods are associated with downpours of rain over certain geographic features. This implies that it is in fact possible to predict where they might occur.

41. B, False

They are attributed to record demand in both new and mature markets.

42. B, False

The 700 million forecast is for sales next year, which will be six years after sales of 200 million were realized.

43. B, False

This year's forecast has been increased three times by a total of almost 100 million so the most recent increase could not have been for the full amount.

44. C, Cannot tell

The number of people against the proposal is not detailed and cannot be inferred.

45. B, False

The proposal is to clone the lions and the argument against this (so the counter-argument) is made in some detail.

46. B, False

The passage does not state this. It reports the views of the scientists on the role of biotechnological intervention.

47. A, True

This can be inferred from the passage as the plan would not risk breaking EU legislation otherwise.

48. B, False

The conflict might exist over the transfer of personal details, not jobs.

49. A, True

The passage states that details cannot be transferred without written consent, therefore the truth of this statement can be inferred from the passage.

50. A, True

The chances have increased from 27,500 to 24,000 to one; the number of winning numbers has increased because of this improvement in odds and also because there are more numbers in the draw.

51. B, False

The new machine completes the task in half the previous five and a half hours; this means that the draw now takes 165 minutes.

52. C, Cannot tell

The construction of the new machine is not detailed and cannot be inferred from the passage.

53. B, False

Self-discipline is described as critical but the passage does not suggest that a foundation degree student must show more self-discipline than a conventional degree student.

54. B, False

The opening sentence makes it clear that doing a foundation degree involves going to university.

55. B, False

It is also suggested that the foundation degree student is better able to compete for graduate-level jobs because of their relevant work experience.

56. B, False

This is not the necessary outcome; they may, for example, have long-term contracts with suppliers that protect them from the commodity price rises.

57. A, True

Until they are able to pass on the price increases, manufacturers' margins will be eroded.

58. B, False

The passage also identifies emission trading and climate control as further sources of pressure and does not indicate which if any represents the more serious challenge.

59. A, True

The free movement of people to the United States a hundred years ago is contrasted to the barriers to such movement today.

60. B, False

Governments must ensure that their economies are competitive because of the relative free movement of capital, not because of the restrictions on the movement of labour.

61. B, False

Globalization is described as a situation where factories and capital migrate. If workers were also able to move around the world then the process would be more, not less, pronounced.

62. A, True

To be discriminatory is to be unequal in your treatment on the basis of prejudice. Therefore the government and media sanction discrimination by repeating the view that young teenage mothers are irresponsible burdens on the state.

63. B, False

They are described as found in government and the media but they are not described in the passage as prevalent.

64. C, Cannot tell.

This specific claim is not reported and it cannot be inferred from the passage.

65. B, False

Cold weather is described as causing the blood to thicken and possibly clot, not hypertension.

66. B, False

They have a 60% greater risk of a heart attack, not a 60% risk.

67. C, Cannot tell

The relationship between hypertension and heart attacks is linked to a rapid drop in temperature and not to particular months or seasons.

### **Test 3: Analysis of information**

1. C, Cannot tell

Most flag carriers have raised a surcharge on short-haul passengers. No information is provided on the policy towards long-haul passengers and the answer cannot be inferred from the passage.

2. A, True

The passage states that national carriers have reduced fares on their short-haul European operations.

3. B, False  
Losses have not occurred on short-haul flights. The passage states that no money will be made on these operations.
4. B, False  
Traders have noticed that some countries are purchasing stock at levels above their rate of consumption.
5. A, True  
The truth of the statement is a valid inference.
6. C, Cannot tell  
Traders have recently increased the level of world demand but no information is given as to when these countries became major oil importers and this information cannot be inferred from the passage.
7. B, False  
The assertion is not made, nor can it be inferred. The result can be explained otherwise; it could be, for example, due to bias in the test.
8. A, True  
This can be inferred from the opening statements of the passage.
9. B, False  
Satire is a mocking, jocular style with a sharp critical edge of someone or something.
10. B, False  
They are almost as economical but hybrid-powered cars have the environmental advantage that emissions are far lower than for diesel-powered cars.
11. A, True  
An economic case could be made for very high-mileage drivers in the United States but not in Europe. This is because the option to buy a diesel-powered car is open to such European drivers but not their US counterparts.

12. B, False

The higher initial cost of hybrids means a longer payback time the further fuel costs drop and so a weaker economic case.

13. C, Cannot tell

Eighty per cent is a high percentage of most things but we do not know what the reuse rate is for other things so cannot make a relative judgement.

14. C, Cannot tell

These points are not made in the passage and do not follow from its content.

15. B, False

The passage would contribute to both sides of such a debate.

16. A, True

Students find it easier to obtain top marks now that course work and projects are awarded marks that count towards the final grade.

17. C, Cannot tell

We cannot tell whether the statement is true or false because the total number of A grades awarded is not given.

18. B, False

Because the number of A grades has more than doubled from the previous 10% of candidates, the proportion of students who now score over 60% must be more than 20%.

19. B, False

The case includes the fact of the growing number of cases in industrial tribunals.

20. A, True

This further example is consistent with those given in the passage and so would serve to further illustrate the point made.

21. A, True

The number of claims for compensation (excluding those in industrial tribunals) is falling, so we do not face a higher risk of a claim outside of employment.

22. A, True

These sectors are identified in the passage as among the big spenders who suffered the effects.

23. A, True

Other reasons might exist for holding cash but the passage gives examples that suggest a cautious outlook is one. It is therefore reasonable to conclude from the passage that cash at hand is a symptom of such an approach.

24. B, False

The passage states that this is a mistake made in the 1990s but it does not imply that, in general, over-investment leads to excessive production capacity.

25. C, Cannot tell

No information is provided on the emotional state of the caged cod and this information cannot be inferred from the passage.

26. A, True

The cod farmers are implementing measures that aim to address the reasons for the discrediting of salmon farming.

27. A, True

The passage states that cod farmers have adopted rules for fish welfare.

28. A, True

The waste from nuclear power is its major drawback. Solving it would give it a strong environmental case.

29. A, True

The passage describes the visual intrusion caused by renewable sources.

30. C, Cannot tell  
The passage does not provide this information and it cannot be inferred.
31. A, True  
The issues are laundering and tax avoidance, and on the issue of laundering the rules do seem to be different currently.
32. B, False  
They will be required to provide information only on clients they suspect of money laundering or tax avoidance.
33. C, Cannot tell  
Whether or not this is a motive of the accountants is not covered in the passage and cannot be inferred from it.
34. C, Cannot tell  
This issue is not discussed in the passage and cannot be inferred.
35. B, False  
Twenty-seven per cent of UK jobs are advertised on the net.
36. A, True  
The passage states that one of the most commonly cited reasons for advertising jobs on the net was cost-effectiveness.
37. A, True  
It is reported that the vast majority of employers do not consider it a significant issue, and evidence of a detrimental impact at work is hard to find.
38. B, False  
There is a potential conflict on the issue of testing staff for the use of recreational drugs in order to provide a safe workplace in some critical industries.



39. C, Cannot tell

The passage does not comment on this issue, and the truth or otherwise of the statement cannot be inferred from the passage.

40. A, True

Had the technologies that gave rise to these problems been assessed before being implemented then these problems might have been avoided.

41. B, False

The benefits would not be realized unless most governments adopted the recommendation.

42. C, Cannot tell

The passage does not provide this information and it cannot be inferred from the passage.

43. A, True

The condition is activated by a chaotic or difficult home environment.

44. B, False

While this many children are at risk of suffering the condition, it cannot be inferred that they all share this type of experience at home.

45. B, False

The passage states that this is only the case if the condition is left untreated.

46. C, Cannot tell

The passage is concerned with the price of homes in the capital relative to the rest of the UK over the past five years. The cost of homes in real terms over this period is not covered and cannot be inferred.

47. A, True

The passage predicts that the current trend will be reversed, given the number of people wanting to move into the city over the next two decades.

48. A, True  
The divide will widen as house prices in the capital rise faster than prices in the rest of the country.
49. C, Cannot tell  
Something that is carcinogenic can cause cancer. Contradictory information is provided on whether or not a compound of nitrates can cause cancer, so it is not possible to decide whether this is true or not.
50. A, True  
The passage states that a great many studies have failed to find such a link.
51. A, True  
This is the new, positive view of dietary nitrates described in the passage.
52. B, False  
No compulsory element is described.
53. B, False  
The initiative is offered to employees who have medical insurance paid for by their employers.
54. A, True  
This is an example of the kind of intervention that could be offered under the initiative.
55. A, True  
The most efficient experimental hydrogen car is less efficient than the best production car with a diesel combustion engine and, if widely adopted, hydrogen risks greater environmental damage.
56. B, False  
The environmental impact of the hydrogen economy could be worse or better than the petroleum economy but it is false to say that it would be worse.

57. B, False

The passage predicts that such a powered car will become a reality but it is not supportive (or critical) of that development.

58. A, True

The study reports on trends in mental health over 25 years.

59. A, True

The conditions are reported across social class and racial groups and affect members of all family types as well as girls and boys.

60. B, False

A number of possible causes are considered and rejected such as inequality or the rise in the frequency of single parents.

61. A, True

If the theory is correct then this is a local extension of it.

62. B, False

It could also mean that the population is elderly but its members have not yet made significant drawings from their savings.

63. A, True

Again this is a logical prediction from the theory.

64. B, False

Eight flight tests have taken place but the test programme has included simulations and theoretical models in addition to these.

65. A, True

It is stated that a lot of the development programme has relied on models and simulations.

66. C, Cannot tell

The passage does not contain this information, nor can it be inferred.

## **Chapter 4:** **20 numerical reasoning mini-tests**

1. B, 16.5  
 $30 \div 100 \times 55$
2. D, 9.6  
 $80 \div 100 \times 12$
3. C, 22.5  
 $5 \div 100 \times 450$
4. A, 2.55  
 $17 \div 100 \times 15$
5. A, 38.5  
 $22 \div 100 \times 175$
6. D, 22.8  
 $38 \div 100 \times 60$
7. C, 24.2  
 $11 \div 100 \times 220$
8. B, 432  
 $90 \div 100 \times 480$
9. B, 42.75  
 $57 \div 100 \times 75$
10. C, 266.4  
 $74 \div 100 \times 360$
11. D, 58.8  
 $60 \div 100 \times 98$

12. B, 75.9

$$23 \div 100 \times 330$$

13. C, 0.28

$$56 \div 100 \times 0.5$$

14. D, 40.6

$$7 \div 100 \times 580$$

15. A, 32.4

$$36 \div 100 \times 90$$

16. B, 9.1

$$13 \div 100 \times 70$$

17. C, 65.6

$$41 \div 100 \times 160$$

18. C, 6.3

$$14 \div 100 \times 45$$

19. D, 70.56

$$84 \div 100 \times 84$$

20. A, 2%

$$100\% = 2,500\text{p}, 1\% = 25\text{p}, 2 \times 25 = 50$$

21. C, 5%

$$100\% = 2,000 \text{ ml}, 1\% = 20 \text{ ml}, 5 \times 20 = 100$$

22. B, 5%

$$2 \text{ hours} = 120 \text{ minutes so } 100\% = 120, 1\% = 1.2, 5 \times 1.2 = 6$$

23. D, 0.05%

$$1 \text{ km} = 1,000 \text{ metres and } 500 \text{ cm} = 0.5 \text{ of a metre. } 100\% = 1,000, 1\% = 0.1 \text{ and } 0.5 \times 0.1 = 0.05\%$$

24. D, 0.25%

£1 = 1%. 25p as a percentage of 100p = 0.25

25. B, 12.5%

26 weeks is 50% of one year so 12.5% of four

26. A, 2.25%

27. B, 1.25%

28. C, 6.25%

29. D, 0.4%

30. B, 1.5%

31. A, 0.5%

1 hour 40 minutes =  $60 \times 60 = 3,600$ ,  $40 \times 60 = 2,400 = 6,000$  seconds.

30 as percentage of 6,000 = 1 in 200 = 0.5%

32. C, 3.33%

12 metres = 12,000 mm and 400 as a percentage of 12,000 = 4, as a percentage of 120 (cancel the zeros)  $4/120$  simplifies to  $1/30$  which is equivalent to 3.33% taken to two decimal places ( $30 \div 1 \times 100$ )

33. A, 14%

1.2 kilometres = 1,200 metres,  $1\% = 12$ ,  $12 \times 14 = 168$

34. C, 2%

365 days = 100%,  $1\% = 3.65$ ,  $7.3 \div 3.65 = 2$

35. B, 4%

$100\% = 4500\text{p}$ ,  $1\% = 45\text{p}$ ,  $180 = 4 \times 45$

36. D, 22.5%

$45 \div 200 \times 100$

37. B, 90%

$$630 \div 700 \times 100$$

38. C, 25%

$$31.5 \div 126 \times 100$$

39. A, 6%

$$5.4 \div 90 \times 100$$

40. D, 33.33%

$$32 \div 96 \times 100$$

41. C, 32%

$$144 \div 450 \times 100$$

42. A, 45%

$$135 \div 300 \times 100$$

43. C, 20%

$$72 \div 360 \times 100$$

44. B, 17%

$$42.5 \div 250 \times 100$$

45. D, 35%

$$665 \div 1,900 \times 100$$

46. B, 16.7%

$$10 \div 60 \times 100$$

47. A, 15%

$$21 \div 140 \times 100$$

48. D, 85%

$$17 \div 20 \times 100$$

49. C, 37.5%

$$24 \div 64 \times 100$$

50. A, 27.5%

$$11 \div 40 \times 100$$

51. C, 80%

$$360 \div 450 \times 100$$

52. A, 41.25%

$$165 \div 400 \times 100$$

53. B, 48%

$$120 \div 250 \times 100$$

54. D, 75%

$$1,200 \div 1,600 \times 100$$

55. B, 24%

$$19.2 \div 80 \times 100$$

56. C, 25%

$$\begin{aligned}\text{Percentage decrease} &= \text{decrease divided by the initial value} \times 100 = \\ 2 \div 8 \times 100 &= 25\end{aligned}$$

57. A, 30%

$$\begin{aligned}\text{Percentage increase} &= \text{increase divided by initial value} \times 100 = 18 \div \\ 60 \times 100 &= 30\end{aligned}$$

58. D, 60%

$$42 \div 70 = 0.6 \times 100 = 60$$

59. B, 16%

$$12 \div 75 = 0.16 \times 100 = 16$$

60. C, 20%

$$3 \div 15 = 0.2 \times 100 = 20$$



61. A, 12.5%

$$3 \div 24 = 0.125 \times 100 = 12.5$$

62. C, 70%

$$58.1 \div 83 = 0.7 \times 100 = 70$$

63. B, 40%

$$3.2 \div 8 = 0.4 \times 100 = 40$$

64. A, 40%

$$17.6 \div 44 = 0.4 \times 100 = 40$$

65. D, 15%

$$6.9 \div 46 = 0.15 \times 100 = 15$$

66. C, 20%

$$13.8 \div 69 = 0.2 \times 100 = 20$$

67. C, 25%

$$9 \div 36 = 0.25 \times 100$$

68. A, 20%

$$4.6 \div 23 = 0.2 \times 100$$

69. B, 30%

$$3.6 \div 12 = 0.3 \times 100$$

70. D, 16%

$$14.4 \div 90 = 0.16 \times 100$$

71. C, 5%

$$3.7 \div 74 = 0.05 \times 100$$

72. A, 5%

$$2.75 \div 55 = 0.05 \times 100$$

73. D, 90%

$$6.3 \div 7 = 0.9 \times 100$$

74. B, 70%

$$9.8 \div 14 = 0.7 \times 100$$

75. B, 12.5%

$$4.5 \div 36 = 0.125 \times 100$$

76. C, 20% loss

Percentage loss is calculated as follows: loss divided by buying price

$$3 \div 15 = 0.2 \times 100$$

77. A, 40% profit

Percentage profit is calculated as follows: profit divided by initial cost

$$12 \div 30 = 0.4 \times 100$$

78. B, 5% profit

$$2 \div 40 = 0.05 \times 100$$

79. C, 91% loss

$$728 \div 800 = 0.91 \times 100$$

80. D, 3% profit

$$2.1 \div 70 = 0.03 \times 100$$

81. A, 42% loss

$$23.1 \div 55 = 0.42 \times 100$$

82. C, 15% profit

$$2.67 \div 17.80 = 0.15 \times 100$$

83. B, 75% loss

$$30.30 \div 40.40 = 0.75 \times 100$$

84. B, 25% profit

$$18.75 \div 75 = 0.25 \times 100$$

85. D, 9% loss

$$9.9 \div 110 = 0.09 \times 100$$

86. A, 60:90

To divide the sum by the ratio: add the values in the ratio together and divide the initial sum by this amount, then calculate the answer by multiplying the ratio values by the result.  $2 + 3 = 5$ ,  $150 \div 5 = 30$ ,  $2 \times 30 = 60$ ,  $3 \times 30 = 90$ , so the answer is 60:90

87. C, 18:72

$$90 \div 5 = 18, 1 \times 18 = 18, 4 \times 18 = 72$$

88. D, 84:12

$$96 \div 8 = 12, 12 \times 7 = 84, 12 \times 1 = 12$$

89. B, 30:105

$$135 \div 9 = 15, 15 \times 2 = 30, 15 \times 7 = 105$$

90. D, 100:80

$$180 \div 9 = 20, 5 \times 20 = 100, 4 \times 20 = 80$$

91. A, 78:39

$$117 \div 9 = 13, 13 \times 6 = 78, 13 \times 3 = 39$$

92. B, 75:125

$$200 \div 8 = 25, 25 \times 3 = 75, 25 \times 5 = 125$$

93. C, 150:100:200

$$450 \div 9 = 50, 50 \times 3 = 150, 50 \times 2 = 100, 50 \times 4 = 200$$

94. A, 90:135:45

$$270 \div 6 = 45, 45 \times 2 = 90, 45 \times 3 = 135, 45 \times 1 = 45$$

95. D, 72:56:64

$$192 \div 24 = 8, 8 \times 9 = 72, 8 \times 7 = 56, 8 \times 8 = 64$$

96. B, 480:180:660

$$1,320 \div 22 = 60, 60 \times 8 = 480, 60 \times 3 = 180, 60 \times 11 = 660$$

97. C, 10:30:45

$$85 \div 17 = 5, 5 \times 2 = 10, 5 \times 6 = 30, 5 \times 9 = 45$$

98. B, 84:24:60

$$168 \div 14 = 12, 12 \times 7 = 84, 12 \times 2 = 24, 12 \times 5 = 60$$

99. D, 24:72:32

$$128 \div 16 = 8, 8 \times 3 = 24, 8 \times 9 = 72, 8 \times 4 = 32$$

100. A, 720:900:180

$$1,800 \div 10 = 180, 180 \times 4 = 720, 180 \times 5 = 900, 180 \times 1 = 180$$

101. B, 7:2

Find the highest common factor (HCF); in this case it is 9,  $63 \div 9 = 7$ ,  
 $18 \div 9 = 2$

102. A, 1:2

$$\text{HCF } 27, 27 \div 27 = 1, 54 \div 27 = 2$$

103. D, 5:3

$$\text{HCF is } 3, 3 \times 5 = 15, 3 \times 3 = 9$$

104. D, 9:4

$$\text{HCF} = 6, 6 \times 9 = 54, 6 \times 4 = 24$$

105. C, 7:8

$$\text{HCF} = 4, 4 \times 7 = 28, 4 \times 8 = 32$$

106. A, 1:3

$$\text{HCF} = 13, 1 \times 13 = 13, 3 \times 13 = 39$$

107. D, 2:7

$$\text{HCF} = 7, 7 \times 2 = 14, 7 \times 7 = 49$$

108. B, 5:1

$$\text{HCF} = 3, 3 \times 5 = 15, 3 \times 1 = 3$$

109. C, 6:5

$$\text{HCF} = 12, 12 \times 6 = 72, 12 \times 5 = 60$$

110. D, 4:5

$$\text{HCF} = 5, 5 \times 4 = 20, 5 \times 5 = 25$$

111. B, 3:2:4

$$\text{HCF} = 3, 3 \times 3 = 9, 3 \times 2 = 6, 3 \times 4 = 12$$

112. A, 4:6:1

$$\text{HCF} = 5, 5 \times 4 = 20, 5 \times 6 = 30, 5 \times 1 = 5$$

113. C, 8:2:3

$$\text{HCF} = 4, 4 \times 8 = 32, 4 \times 2 = 8, 4 \times 3 = 12$$

114. B, 5:2:1

$$\text{HCF} = 9, 9 \times 5 = 45, 9 \times 2 = 18, 9 \times 1 = 9$$

115. A, 9:1:5

$$\text{HCF} = 6, 6 \times 9 = 54, 6 \times 1 = 6, 6 \times 5 = 30$$

116. A, £364

$$4,550 \div 100 \times 8$$

117. C, £574.34

$$650 \div 100 \times 94 = 611, 611 \div 100 \times 94 = 574.34$$

118. C, 60 m

Treat the stretched carpet as 105%. Work out 100%.  $63 \div 105 = 0.6 \times 100 = 60$

119. C, 5 acres

$$3 = 60\%, \text{ so } 100\% = 3 \div 60 = 0.05 \times 100 = 5$$

120. B, £600

$$690 = 115\%, 690 \div 115 = 6 \times 100 = 600$$

121. D, 20%

$$7 \div 35 = 0.2 \times 100 = 20$$

122. B, 24%

$$\text{£1.20 profit on the two items, } 120 \div 500 = 0.24 \times 100 = 24$$

123. A, 5%

$$5 \text{ hours} = 300 \text{ minutes, } 15 \div 300 = 0.05 \times 100 = 5$$

124. C, 6%

$$3,200 - 3,008 = \text{£}192 \text{ decrease, } 192 \div 3200 = 0.06 \times 100$$

125. A, £900

$$112\% = 1,008, 1,008 \div 112 = 9 \times 100$$

126. C, 40%

$$100\% = 3,200, 100 \div 3,200 \times 1,280 = 40$$

127. C, 37.5%

$$12 \div 32 = 0.375 \times 100$$

128. B, 15%

$$33 \div 220 = 0.15 \times 100$$

129. A, 48 grams

$$320 \div 100 \times 15 = 48$$

130. C, 30%

$$234,000 - 180,000 = 54,000, 54,000 \div 180,000 = 0.3 \times 100$$

131. B, 7%

$$1,750 \div 25,000 = 0.07 \times 100$$

132. A, 27%

$$3,200 - 2,336 = 864, 864 \div 3,200 = 0.27 \times 100$$

133. D, 96

$$480 \div 100 \times 80 = 384, 480 - 384 = 96$$

134. A, 15,435

Year 1,  $14,000 \div 100 \times 5 = 700$ , Year 2,  $14,700 \div 100 \times 5 = 735$ , so new population after two years = 15,435

135. A, £5.60

$$588 = 105\%, 588 \div 105 = 5.6 \times 100$$

136. D, £61.20

$$76.5 \div 100 = 0.765 \times 80 = 61.2$$

137. B, 140 grams

$$350 \div 100 = 3.5 \times 40 = 140$$

138. C, 19%

$$400 - 324 = 76, 76 \div 400 = 0.19 \times 100$$

139. B, £40,000

$$6\% = 2,400, 1\% = 2,400 \div 6 = 400 \times 100 = 40,000$$

140. A, 60%

$$36.8 - 23 = 13.8, 13.8 \div 23 = 0.6 \times 100$$

141. C, 110%

$$50.4 - 24 = 26.4, 26.4 \div 24 = 1.1 \times 100 = 110$$

142. D, £260

$$7.5\% = 19.5, 1\% = 19.5 \div 7.5 = 2.6 \times 100 = 260$$

143. A, 65%

$$7,500 = 100\%, 1\% = 7,500 \div 100 = 75, 4,875 \div 75 = 65$$

144. B, 384

$$100\% = 480, 1\% = 480 \div 100 = 4.8, 4.8 \times 80 = 80\% = 384$$

145. A, 85%

$$210 = 100\%, 1\% = 210 \div 100 = 2.1, 210 - 31.5 = 178.5, 178.5 \div 2.1 = 85$$

146. D, £350

$$106\% = 371, 371 \div 106 = 3.5, 100 \times 3.5 = 350$$

147. D, 33%

$$1\% = 420, 14,000 \div 420 = 33.33$$

148. B, 18.75 grams

$$125 \div 100 = 1.25 \times 15 = 18.75$$

149. C, £2,497.50

$$8,325 \div 100 = 83.25 \times 30 = 2,497.50$$

150. A, 3,960

$$8,800 \div 100 = 88 \times 45 = 3,960$$

151. B, £18,500

$$50,000 \div 100 = 500 \times 37 = 18,500$$

152. C, 17%

$$100 \div 250 = 0.4 \times 42.5 = 17$$

153. A, 6,450

$$7,500 \div 100 = 75 \times 86 = 6,450$$

154. D, £6.48

$$1\% = 36.00 \div 100 = 0.36 \times 18 = 6.48$$

155. A, 12%

$$4.5 \div 37.5 = 0.12 \times 100 = 12$$



156. D, 52.5 grams

$$100\% = 21 \div 40 = 0.525 \times 100 = 52.5$$

157. A, 35%

$$1,800 \div 100 = 18, 630 \div 18 = 35$$

158. B, 80%

$$1\% = 450 \div 100 = 4.5, 360 \div 4.5 = 80$$

159. A, 12%

$$20,160 - 18,000 = 2,160, 2,160 \div 18,000 = 0.12 \times 100$$

160. A, 1.32 grams

$$90 \div 15 = 6, 6 \div 100 = 0.06 \times 22 = 1.32$$

161. C, £90,000

$$24,300 \div 27 = 900, 900 \times 100 = 90,000$$

162. D, £276

$$15,950 - 12,500 = 3,450, 3,450 \div 100 = 34.5 \times 8 = 276$$

163. A, Last year

$$\text{Last year } 63,000 \div 630,000 = 0.1 \times 100 = 10\%. \text{ This year } 6,720 \div 84,000 = 0.08 \times 100 = 8\%$$

164. A, 15%

$$\text{Find 66 as a percentage of 440, } 440 \div 100 = 4.4, 66 \div 4.4 = 15$$

165. C, 200

$$45\% \text{ of } 800 \text{ are men, so } 45 \times 800 = 36,000 \div 100 = 360; 30\% \text{ are women aged 30 or under, so } 30 \times 800 = 24,000 \div 100 = 240; 800 - 360 - 240 = 200 \text{ remaining who must be women over 30}$$

166. D, £8,100

$$6,300 \div 7 = 900, 900 \times 9 = 8,100$$

167. C, 45

$$5 + 3 = 8, 72 \div 8 = 9, 9 \times 5 = 45$$

168. A, 64

$$80 \div 5 = 16, 4 \times 16 = 64$$

169. B, 200

$$1,500 \div 5 = 300, 300 \times 2 = 600, 800 - 600 = 200$$

170. C, 40%

$$2 + 3 = 5, 100 \div 5 = 20, 2 \times 20 = 40$$

171. A, £800

Convert the contributions to ratios  $3,000:4,500:10,500 = 3:4.5:10.5 = 18$ . We do not use fractions in ratios, so get rid of them by multiplying by 2 = 6:9:21; this simplifies to 2:3:7 = 12,  $4,800 \div 12 = 400$ , so investor A receives  $2 \times 400 = 800$

172. D, £126

$$5 + 3 = 8, 336 \div 8 = 42, 42 \times 3 = 126$$

173. A, £5,000

900:2,700 simplifies to 9:27, which in turn simplifies to 1:3,  $15,000 \div 3 = 5,000$

174. D, 3:2

Simplifying the ratio gives the answer. Cancelling the zeros gives you 21:14; divide both by 7 to obtain the lowest expression 3:2

175. A, 28

You need to establish the equivalent ratio the first value of which is 12.  $3 \times 4 = 12$ , so the answer is  $7 \times 4 = 28$

176. B, 4:1

The sales (largest value) comes first and 72:18 simplifies by dividing both by the HCF of 18 to 4:1

177. B, 0.05

178. D, 600 kg

$$4 + 2 + 1 = 7, 1,050 \div 7 = 150, 150 \times 4 = 600$$

179. A, 385

$$7 + 4 = 11, 605 \div 11 = 55, 55 \times 7 = 385$$

180. A, 0.14

181. C, 50:3

Ratios should not include fractions or decimals so we must multiply both sides by the same value to remove the decimal. Moving the decimal one place gives 350:21; simply divide the HCF by 7 to get 50:3

182. D, 0.75

183. C, 8:5

You need to simplify 840:525. Do not worry if you cannot quickly work out the HCF (105); just keep dividing both sides to find simpler equivalent ratios until you get down as low as possible. Try 7 and then 15, or 5, 7 and 3

184. B, 0.04

185. B, 1 in 250

The damage occurred 20:5,000, which simplifies to 1 in 250

186. A, 0.24

187. D, £4,500

$$\text{The ratio is } 3:1, £6,000 \div 4 = 1,500, 1,500 \times 3 = 4,500$$

188. B, 0.32

189. B, £2,590

$$3 + 7 = 10, 3,700 \div 10 = 370, 7 \times 370 = 2,590$$

190. B, 0.125

191. C, 4:1

This ratio allows comparisons to be drawn as to the extent to which companies are dependent on outside borrowing. The ratio simplifies to 4:1 by dividing both sides by 310,000

192. B, 0.2

193. C, 3:5:2

Move the decimal points to make the figures 36:60:24, divide by the HCF 12 to express the ratio in its simplest form

194. A, 0.64

195. C, 7:1

A percentage can be expressed as a ratio totalling 100, in this case 87.5:12.5. The HCF is 12.5 and it simplifies to 7:1

196. A, 3:2 (in practice it might be expressed as the improper ratio 1.5:1)

The HCF is 14; the ratio describes the company as holding assets of £1.0 for each £1 currently owned

197. C, 0.25

198. D, £198

$$6 + 8 = 14, 462 \div 14 = 33, 33 \times 6 = 198$$

199. A, 0.25

200. D, 5:1 (might be expressed in practice as 5)

The price/earnings ratio is used to evaluate investments. It is a ratio between price and earnings expressed in its simplest form

## **Chapter 5: Two realistic data interpretation tests**

### **Test 4**

1. D, 13:1

The price/earnings ratio of share D is 13:1. This means that an investor would have to pay 13 times the last reported earnings for that share. All the others represent better value than this

2. C, Not less than 370

The cost–benefit figure for road safety schemes is a minimum of 100,000;  $37 \text{ million} \div 100,000 = 370$

3. A, 5,070,000,000

$3,900 \times 1.3 \text{ million} = 5,070,000,000$  or 5 billion and 70 million

4. B, 1:12,500

Passage 1 states that one is 40 times more likely to be killed in an accident in the home than in an air crash and that the chances of dying in an air crash are 1 in 500,000. The chances of dying from an accident in the home are 40 times more than 1 in 500,000.  $500,000 \div 40 = 12,500$

5. D, 730

Passage 2 states that 10 people die each day on our roads, so in a typical year 3,650 deaths occur,  $3,650 \div 100 \times 20 = 730$

6. A, 6%

$234 \div 3,900 = 0.06 \times 100$

7. C, 98

In the passage it is stated that ‘one is 40 times more likely to be killed in an accident in the home than in a plane crash’ and that ‘each year 3,900 deaths occur in the home as a result of an accident’. From these statements the average annual number of deaths due to plane crashes can be calculated  $3,900 \div 40 = 97.5$  or C, 98 lives are lost

8. D, cannot tell

The cost per life saved for the approved scheme can be calculated ( $37.5\text{m} \div 500 = 75,000$ ), but this is not necessary as the cost-benefit intervention point for safety initiatives at home could be a higher figure than this

9. B, 161

In the original survey of 660, 79 young people (12%) were concerned most about getting into trouble. If the survey size was increased to 2,000 and the percentage remained at 12% then 240 young people would indicate that they were most concerned about getting into trouble, which is 161 more young people than the original number

10. D, 264

$$12\% + 28\% = 40\%, 660 \times 40\% = 264$$

11. B, Funding drug use

Other reasons saw greater percentage change but apart from buying alcohol (only 4 – 6) all the others were percentage decreases

12. C, 19%

$$100\% = 42, 8 = 100 \div 42 = 2.38 \times 8 = 19.04 = 19\%$$

13. A, 4:1

Save time calculating the ratios by comparing the percentages.  $25\%$  and  $23\% = 48\%$ ; the ratio is therefore  $48\%:12\%$ , which can be simplified to 4:1 (HCF 12)

14. D, 14%

30% fewer respondents = 70% of 660,  $660 \div 100 = 6.6 \times 70 = 462$  respondents,  $462 = 100\%$ , so 66 respondents =  $100 \div 462 = \text{approx } 0.216$ ,  $0.216 \times 66 = 14.256$ ; nearest whole percentage = 14%

15. B, 744

Figure 1 is based on 660 young people who each made one response, and figure 2 is based on 42 young people who each made two responses (concerning their first and most recent crime)  $660 + 84 = 744$

16. C, 1.05m

Find the difference between 70% of 2.7m and 70% of 1.2m.  $2.7\text{m} \times 70\% = 1.89\text{m}$  –  $1.2 \times 70\% = 0.84\text{m}$ .  $1.89 - 0.84 = 1.05\text{m}$  more sets sold into the EU and US territories in 2007 than 2009

17. A, 241.5m

The figures state that 50 sets cost £5,750 so 1 set costs £115. The total 2.1m sets sold in 2008 would therefore cost  $2.1\text{m} \times £115 = £241.5\text{m}$

18. A, £115

$$5,750 \div 50 = 115$$

19. B, £45

$$1,500 + 750 = 2,250 \div 50 = 45$$

20. D, 12%

$$128.8 - 115 = 13.8, 13.8 \div 115 = 0.12 \times 100 = 12$$

21. C, Increase by 210

The total profit on 50 sets produced at absorption price and sold at the recommended selling price =  $128.8 \times 50 - 5,750 = 690$ , cost of 50 at absorption cost and 50 more at marginal cost =  $5,750 + 2,250 = 8,000$ , income of 100 sets sold at 89 = 8,900, profit on 50 absorption and 50 marginal sets sold at 89 = 900, profit increased by  $900 - 690 = 210$

22. A, 14%

Cost is £8,000 (from question 21), profit =  $91.20 \times 100 - 8,000 = 1,120$ , % profit =  $1,120 \div 8,000 = 0.14 \times 100 = 14$

23. B, 13/21

First find the average number of hours. Do this by calculating the total viewing hrs and  $\div$  by the total number of viewers. Take the mid point in each range. Viewing hrs =  $22 \times 200 = 4,400$ .  $27 \times 600 = 16,200$ .  $32 \times 900 = 28,800$ .  $37 \times 400 = 14,800$ ,  $= 64,200 \div$  total viewers 2,100 = 30.57 hrs average. 900 + 400 watch an average number of hours or more, expressed as a fraction this =  $1300/2100$  or 13/21

24. D, 55:1  
 $£2.64:4.8p = 2,640:48$ , which simplifies to 55:1
25. C, 4%  
 $19.75 - 18.96 = 0.79$ ,  $0.79 \div 19.75 = 0.04 \times 100 = 4$
26. A, 36%  
Latest figure is given as 1,033m, increase =  $1,033 - 661.12 = 371.88$ ,  
 $371.88 \div 1,033 = 0.36 \times 100 = 36$
27. B, 15%  
 $4.8 - 4.08 = 0.72$ ,  $0.72 \div 4.8 = 0.15 \times 100$
28. B, Nil (once the broadband income has been rounded up).  
Fixed line revenue dropped from 4.0bn to 3.5bn = - 0.5bn, broadband  
has increased from 0.6 to 1.1bn = + 0.5bn, so net effect is nil
29. A, 0.067bn  
Group turnover in 2005 is 4.6bn; in 2004 it is 3.5bn from voice and 1.033  
from broadband = 4.533bn.  $4.6bn - 4.533bn = 0.067bn$
30. D, 129.5%  
It is clear from the figure that the number of broadband connections  
were greater in 2003 than 2004, so the percentage increase on 2002 was  
higher in 2003 than in 2004. Estimate from the figure that the number  
of broadband connections in 2003 were 3.75m – an increase on the  
2002 figure of 2.9m and a percentage increase close to D 129.5%

## Test 5

1. B, 1/20  
420 responded in total and 21 responded London, so find the equivalent  
fraction amongst the suggested answers to  $21/420 = 1/20$



2. D, cannot tell

The size of a country's population does not tell you the number of people eligible to vote (for example it is usual for children not to have a vote) for this reason the answer must be cannot tell

3. C, 1996

It can be seen from the graph that the percentage turnout fell from 55.1 to 49.1

4. D, 29%

The cited reasons total 56%, 15% gave no reason,  $56 + 15 = 71$  leaving 29 from 100

5. A, 5,150

The number of votes by men and women can be used. 55% of 5,000 men + 48% of 5,000 women voted pink =  $2,750 + 2,400 = 5,150$

6. B, 19:26

Tax as main reason cited received 5% = 500 of respondents, Education = 4% = 400, pink candidate on tax  $500 \times 56\%$ , on education  $400 \times 25\%$ , = 380; blue candidate on tax  $500 \times 44\%$ , on education  $400 \times 75\%$  = 520, ratio is 380:520 which simplifies to 19:26

7. C, 48.97%

We know that the pink candidate received 5,150 votes so the blue candidate received 4,850. Of pink, 48% are graduates, so  $5,150 \times 48\% = 2,472$ ; of blue, 50% of 4,850 = 2,425; total graduates 4,897, as a percentage of 10,000 = 48.97

8. A, 607

In 1992 55.1% of voters turned out to vote so the official can expect 55.1% of 44,080 registered voters to vote and 1 in 40 of these to spoil their vote.  $44,080 \times 55.1\% = 24,280 \div 40 = 607$  spoilt votes

9. B, £157.05

On average franchised garages would increase their charge from £282  $\times 102.5\% = £289.05$ . Independent garages would increase the average that they charged from £120 + £12 = £132. The difference is £157.05

10. A, 13

$27\%$  of 48 =  $48 \times 0.27 = 12.96$ , which rounds up to 13 garages

11. C, 23

This figure can be taken from the chart,  $7 + 8 + 8 = 23$

12. D, £187.50

The mean is found by finding the total of all the charges and dividing that total by the number of charges. 48 garages, 20 franchises and 28 independent,  $20 \times 282 = 5,640$ ,  $28 \times 120 = 3,360$ ,  $5,640 + 3,360 = 9,000$ ,  $9,000 \div 48 = 187.5$

13. B, 2:3

All 48 garages are classed as either very good, good, below poor, poor or very poor. 12 franchised garages are classed as below poor or worse so 8 must be classed as very good or good. The ratio then is 8:12, which can be simplified as 2:3 (HCF 4)

14. A, 60%

12 out of 20 are below poor or worse; to express this as a percentage, calculate  $100 \div 20 \times 12 = 60$

15. D, 16%

All stated percentages total 84, the complete pie chart = 100, other =  $100 - 84 = 16$

16. B,  $1/2$

Add the percentages from utilities, rent and food together to obtain  $8 + 15 + 26 = 49/100$  which is almost  $1/2$

17. A,  $\times 2.6$

Expenditure on utilities has increased to 10% while expenditure on rent has remained the same at 26%. Find how many times 26% is greater than 10% to find the answer =  $\times 2.6$  (suggested answer A)

18. C, £1,450

$$116 = 8\%, 116 \div 8 = 14.5 \times 100 = 1,450$$

19. A, £2,400

$$1,800 = 75\% \text{ of gross income, } 100\% = 1,800 \div 75 = 24 \times 100 = 2,400$$

20. C, £144

$$\begin{aligned} \text{Other} &= 16\%, 16\% \text{ of } 2,400 = 2,400 \div 100 \times 16 = 384, 384 \div 8 (3 + 4 + 1) \\ &= 48, 48 \times 3 = 144 \end{aligned}$$

21. A, 4.95% decrease

$$33\% \text{ of } 15 = 4.95, \text{ so the monthly expenditure will decrease } 4.95\%$$

22. B, 4

15,000 annually equals to £1,250 a month and £187.50 = 15% of that monthly spend and 4 types of expenditure are equal to or more than 15% of the monthly sum

23. A, 27%

The table shows the daily spend to increase from £60 to £76.20. Find the % increase from 60 to 76.20. You can do this by finding 1% increase and dividing 16.2 by it ( $60 \div 100 = 0.6$ ,  $16.2 \div 0.6 = 27$ ). Another, possibly quicker way, is to look at the suggested answers. You can reject answer C, as it is obviously wrong ( $60 \times 25\% = 15$ ) then test suggested answers A and B to identify A as correct ( $60 \times 27\% = 16.20$ ) and  $60 \times 127\% = 76.20$

24. B, 23,668,000 or 23.668m

$$\begin{aligned} 3\% \text{ less than } 2004, 24.4 - 3\% &= 24.4 \div 100 = 0.244 \times 3 = 0.732, 24.4 - \\ 0.732 &= 23.668 \end{aligned}$$

25. D, 1.6%

1998 was the previous record with 24 million,  $24.4 - 24 = 0.4$ ,  $0.4 \div 24 = 0.016 \times 100 = 1.6\%$

26. C, 26.84bn

$24.4 \text{ m} \times 110 = 2,684\text{m}$  or 26.84bn

27. B, 2.1m

$30 \text{ m} \times 7\% = 30 \div 100 \times 7 = 2.1$

28. D, 671bn

$26.84\text{bn} = 4\%$ ,  $26.84 \div 4 = 6.71$ ,  $6.71 \times 100 = 671\text{bn}$

29. B, £5.5bn

The average daily spend in 2004 was  $\text{£}76.20 \times 3 = 228.60$ . Average visit  $\times 24.4\text{m}$  visitors that year = 5,577,840,000 or approximately £5.5bn

30. C, 140,000

7% of the UK workforce are employed in tourism which = 2.52 million, divide this total by 18 to find the number of employers = 140,000

# 7

## Interpretations of your scores

### Tests 2 and 3: Verbal analysis

#### **A score over 55**

If you face a graduate-level psychometric test such as GMAT, LSAT, Fast Stream or SHL and are applying for an oversubscribed position or course, then this is the only category of score that you should be content with.

Your score suggests a high level of ability and confidence in the evaluation of written information. You have demonstrated sustained concentration and an ability to understand quickly fairly complex written argument and to correctly infer its logical consequences.

Concentrate the remaining time you have for further practice on material relevant to other sub-tests so that you can perform to this high standard in all aspects of the challenge.

#### **A score of 40 or above**

This is a good score, especially if you secured it in test 2, at your first attempt. If that was the case then take test 3 and try to better it!

In the real test the bulk of candidates are likely to score somewhere in this category. Your score may well be sufficient to get you

through to the next stage of the recruitment process. But it will depend on the number of other candidates and vacancies and your precise position in relation to the performance of others.

If you found you did not have sufficient time to complete all the questions then speed up. You might try risking getting a few more wrong because you do not double-check the passage but have more time to attempt all the questions. Alternatively, practise at better managing your time during the test and avoid spending too long on questions that you find difficult.

If you found it hard to maintain the level of concentration demanded by the practice test then this is entirely normal. At the end of a test like this you should feel completely wiped out! If you don't then you are not making the required effort. Remember that even a very able candidate, if they are to do well in a test like this, has to try very hard. Make yourself keep going right until you hear 'Put your pencil down' or the clock runs out of time.

Undertake more practice and see if you can improve that bit more. If you can then you might succeed in pulling yourself further ahead of the majority of candidates and be more sure of a positive result.

## **A score below 40**

Before you take test 3, go over the questions that you got wrong and the explanations and try to work out where you went wrong. It helps to get someone else's opinion. Such a review will greatly assist you to understand the demands of this type of test.

Once you have completed a thorough review, take a break, overnight preferably, and get yourself into a really determined mindset. Find a quiet space and enough time and take test 3, only this time really go for it and practise what you learnt from test 2; prove to yourself that you can do better. You might well be pleasantly surprised with the second result. If you manage a better score on your second attempt then you have made an important discovery. You have realized that you have what it takes to do well in these tests and you have realized what you have to do to do well in these tests.

Now set aside a quite significant amount of time for further practice. Seek out other titles in the Kogan Page Testing Series containing this sort of question, and make it a habit to read a quality newspaper every day and economic and political weekly journals.

Take encouragement from the fact that with practice you can show dramatic improvements in your score in this type of sub-test. In time you will gain further in confidence, accuracy and speed. It will take time but if the opportunity towards which you are working is something you really want, then simply go for it. You have already begun the process of dramatically improving your score, so take encouragement. The vast majority of candidates will discover that they need more practice the hard way by failing a real test. You are already ahead of them so track down sufficient practice material on which to work and get started in plenty of time.

## **Tests 4 and 5: Data interpretation**

### **A score of 25 or over**

In a graduate or management assessment where the test is being used to select between many more candidates than there are positions or places, this is the category of score you must realize. If you obtained this score then you have continued to demonstrate the necessary speed, accuracy, confidence and familiarity in these key operations. Once you have done all three tests, concentrate the remaining time before your real test on further practice on material relevant to more advanced numerical operations and other sub-tests so that you can perform to this high standard in all aspects of the challenge.

When you have completed the material in this book, go on to more advanced numerical practice material in order to maximize the advantage you enjoy. Suitable material is available in the *How to Pass Advanced Numeracy Tests* and *The Advanced Numeracy Tests Workbook*, both published by Kogan Page.

## **A score between 20 and 24**

It is a good test score and many candidates who score in this category will pass the numerical sub-tests of the challenge they face. But you should practice more to be sure of a more positive result in a real test. Establish which fundamentals were involved in any questions that you got wrong and start a programme of practice that begins with the revision of these operations.

Remember that the operations being examined in these practice tests represent the minimum competencies required for this type of test. So keep improving your mental arithmetic and keep practising so that your numerical reasoning skills continue to improve.

Do not be surprised if you found it hard to maintain the level of concentration demanded by the practice test; most people do. Even the numerically talented have to try really hard to do well in graduate psychometric tests. At the end of a test like this you should feel completely wiped out! If you still have test 6 to go then take a break, overnight preferably, and get yourself into a really determined mindset. Find a quiet space and enough time and take the last test, only this time really go for it and practice what you have learnt; prove to yourself that you can do better.

## **A score below 20**

Continue and extend your efforts to revise your mental arithmetic. Consider undertaking one hour's practice a day over the next three weeks. When travelling on a bus or train, when out for a walk, pose simple sums to yourself and answer them as quickly as possible. I knew a candidate who used to add up the numbers on each car number plate he passed, then he multiplied each number of the car registration plates. He kept this up until he was able to do the calculation before he arrived at the next car. Try it; it worked for him. Another determined candidate purchased a pile of mental arithmetic revision textbooks intended for schoolchildren – they comprise pages and pages of practice questions in the basic operations (you will find them in most bookshops). He worked on these for weeks until his speed and accuracy were such that he was



able to take his basic maths for granted and concentrate instead on evaluating the data presented and the more complex numerical reasoning that the test demanded.

Go over your answers and identify the type of question you got wrong. Use the explanations to establish where you are going wrong. Ask someone to help. Seek out further examples of these questions and practise them until you have mastered them. You will find many hundreds of further practice questions at the intermediate level in *How to Pass Data Interpretation Tests*, *The Numeracy Test Workbook* and *Ultimate Psychometric Tests*, all published by Kogan Page. When you have mastered these, put yourself through the tests in this book all over again.

Don't give up; just keep practising at getting right these essential operations and building up your speed, accuracy and confidence. You are guaranteed to get a lot better really fast – it merely takes hard work and determination!