



Workforce Ability Test 2

Solution Booklet

Instructions

This Ability test comprises **50 questions**, and you will have **50 minutes** in which to correctly answer as many as you can. Calculators are not permitted for this test, and it is recommended you have some rough paper to work on.

The test comprises of three sections:

1. Verbal Section (20 Questions)
2. Abstract Section (10 Questions)
3. Numerical Section (20 Questions)

You will have to work quickly and accurately to perform well in this test. If you don't know the answer to a question, leave it and come back to it if you have time.

You may click Back and Next during the test to review or skip questions.

You can submit your test at any time. If the time limit is up before you click submit the test will automatically be submitted with the answers you have selected. It is recommended to keep working until the time limit is up.

Try to find a time and place where you will not be interrupted during the test.
When you are ready, begin the test.

Many businesses now recognise that there are wide-ranging benefits to be gained from offering their workforce flexible working arrangements. These arrangements can include being able to work from home, job sharing, part-time working and being able to choose when to complete agreed hours, for example through working fewer but longer days, or working flexitime. Employees able to adopt flexible working are better able to balance work and family commitments and are therefore happier at work, experiencing greater job satisfaction. They are also more motivated and less likely to leave which is important because staff recruitment costs are not insignificant to businesses. For businesses, they reap the benefits through productivity increases, and greater cost-effectiveness. Customers can benefit too as businesses are better able to react quickly to changes in the market. All employees have a statutory right to request flexible working arrangements; the law extends no further than insisting employers consider and respond to these requests within a predefined timescale.

Q1 Flexible working arrangements are conducive to better job satisfaction for employees.

True

False

Cannot say

True - This statement is essentially a summary of the third sentence: "Employees able to adopt flexible working are better able to balance work and family commitments and are therefore happier at work, experiencing greater job satisfaction".

Q2 Employees are legally entitled to work flexible hours if they request to do so.

True

False

Cannot say

False - The passage states that "All employees have a statutory right to request flexible

working arrangements; the law extends no further than insisting employers consider and respond to these requests within a predefined timescale”. So the passage is telling us that the law requires the employer to consider the employee’s request but that is as far as the law goes; i.e. it does not go as far as saying they have to honour the request.

Q3 Employers may save on recruitment costs if they introduce flexible working hours.

True

False

Cannot say

True - The passage tells us that by adopting flexible working hours, staff are “more motivated and less likely to leave”. We are also told that “Staff recruitment costs are not insignificant to businesses.” So the passage says that by improving staff retention, businesses are more likely to save money on recruitment costs by adopting flexible working hours.

In a new study of 3,000 employed men in the 19-70 age range over a period of 10 years, researchers found that those working for inconsiderate bosses were more likely to suffer from stress and stress-related illness than those working for more considerate and enlightened bosses. Previous research had shown that employees with inconsiderate bosses suffered from high blood pressure, which is known to increase the risk of heart disease. In this latest survey the researchers asked employees to assess the competence of their bosses as leaders. They found that those who had categorised their boss as incompetent were 25% more at risk of serious heart disease and that this level of risk increased the longer they continued to work for the same boss. The statistics took into account external factors such as social class, educational background, lifestyle and any existing illness. The researchers recommended that should their findings be confirmed, managers should be given training to help them improve their working relationships.

Q4 People who think their boss is incompetent are twenty five percent more likely to suffer stress.

True

False

Cannot say

Cannot say - The passage tells us about research in which 3,000 men were studied, and these men were 25% more likely to suffer stress if they rated their boss as incompetent. However the passage tells us just about the study; it is not telling us anything about people outside the study group, so we cannot say without further information.

Q5 This latest study is the first to suggest a link between the behaviour of bosses and the blood pressure of their employees.

True

False

Cannot say

False - The second sentence tells us that "Previous research had shown that employees with inconsiderate bosses suffered from high blood pressure".

Q6 Managers should be given training to help them improve their working relationships.

True

False

Cannot say

Cannot say - The passage states that recommendations from the study are subject to confirmation. Even then, these would be just a recommendation from one viewpoint' the passage does not tell us explicitly that managers should or should not be given training.

A common difficulty faced by business managers is when the behaviour of a team-member conflicts with established desirable practice. How does a good leader handle such an issue? One effective angle is to lead by example: instead of waiting for a problem to develop, take a proactive approach in heading it off with reference to clearly laid out guidelines. If a problematic situation does develop, controlling it can be made simpler by invoking existing values from a mission statement which has been set out in advance. A good team will always put the needs of the organisation first.

Taking such an approach gives the team a sense of personal involvement which encourages them to feel part of the organisation's mission, internalising the needs of the group rather than feeling a sense of externally imposed obligation. It provides team members with a greater sense of personal control, the sense that they have contributed individually, and by choice, to the well-being of their organisation.

To achieve this, a manager must have a good understanding of the way individual people communicate – a flexible approach is essential, using real-life practical examples relevant to each team-member's particular experience.

Q7 Leading by example is an effective approach in dealing with problematic behaviour from employees.

True

False

Cannot say

True – this statement is correct, as the passage says: “when the behaviour of a team-member conflicts with established desirable practice... one effective angle is to lead by example...”

Q8 A manager who understands how people communicate is able to take a flexible approach in dealing with problems.

True

False

Cannot say

Cannot say – while the passage encourages both effective communication and a flexible approach (“a manager must have a good understanding of the way individual people communicate”, “a flexible approach is essential”) it does not explicitly state that individual communication leads to a flexible approach.

Q9 In a good team, the needs of the organisation are secondary to the needs of the individual.

True

False

Cannot say

False – while the passage generally stresses the importance of understanding individual styles (“a manager must have a good understanding of the way individual people communicate”, “... relevant to each team-member's particular experience.”) it states explicitly that “A good team will always put the needs of the organisation first.”

The secret to success in business is entrepreneurial spirit at all levels of the company. Employees who are identified as entrepreneurs in their own right are more motivated – their own financial success becomes integrated with the company's. Those who are oriented towards personal entrepreneurship will work long hours to develop their own tried-and-tested business practices and strategies, contributing as willing partners to the achievements of the company as a whole.

Orientation and value-formation training can induce this kind of thinking in new staff recruits, inculcating the notion of how quickly it is possible to achieve financial security through hard work and innovative business approaches, combined with the impression that to miss out on opportunities for such rapid economic and social advancement would be at best unwise and at worst catastrophic.

Q10 Employees instilled with the idea of personal entrepreneurship will be less willing to contribute to the success of the company as a whole.

True False Cannot say

False – the passage states in fact that such employees will contribute “as willing partners to the achievements of the company.”

Q11 New staff members can be indoctrinated with the virtues of entrepreneurship.

True False Cannot say

True – the passage states that “this kind of thinking” - which refers directly to the personal entrepreneurship approach discussed in the first paragraph – can be induced through “Orientation and value-formation training”.

Q12 Employees encouraged to think of themselves as entrepreneurs work fewer hours than other staff members.

True

False

Cannot say

Cannot say – while the passage states, “Those who are oriented towards personal entrepreneurship will work long hours”, therefore implying that the answer to this question should be 'false', there is no explicit comparison with other staff in either direction, so no definite answer can be given.

While most forms of discrimination in the workplace have been outlawed, discrimination or bias against some employees seeking career advancement still happens. This discrimination is both unwritten and unacknowledged. A ‘glass ceiling’ is the term used to describe this type of discrimination and refers to the invisible barrier that people hit when they try to progress beyond a certain level in some businesses and organisations. Originally coined to illustrate the hidden use of sexual discrimination against women in professional environments, it is now used to describe any form of discrimination, such as racism or ageism, which prevents qualified or experienced employees reaching even basic levels within their organisation. Some reports and studies now suggest that change is happening and that cracks are beginning to appear in the glass. The studies also claim however that change is happening slowly and that the cracks are small.

Q13 There is no legislation covering discrimination at work so employers have to develop their own ways of preventing it.

True

False

Cannot say

False - The first sentence tells us that “most forms of discrimination in the workplace have been outlawed”. So even though not all forms of discrimination have been outlawed (made illegal), it is not true to say that no legislation exists.

Q14 Males are less likely to experience the glass ceiling effect than females.

True

False

Cannot say

Cannot say - The third sentence tells us what the glass ceiling is and the fourth sentence tells us: "Originally coined to illustrate the hidden use of sexual discrimination against women in professional environments, it is now used to describe any form of discrimination". So if we know it covers all sorts of discrimination and the passage doesn't go on to say if females are more likely to suffer than males, we cannot say for sure whether this statement is true or false, so we have to answer Cannot Say.

Q15 A glass ceiling can prevent qualified people from getting to the top of their field.

True

False

Cannot say

True - The passage tells us that the glass ceiling describes discrimination which is "both unwritten and unacknowledged" and also that the term applies to "any form of discrimination, such as racism or ageism, which prevents qualified or experienced employees reaching even basic levels within their organisation". So it is indeed possible that a 'glass ceiling' can prevent a qualified person getting to the top of their field.

Q16 Which of the following best completes the passage below?

In a survey of job applicants, two-fifths admitted to being at least a little dishonest. However, the survey may underestimate the proportion of job applicants who are dishonest, because_____.

- A. some dishonest people taking the survey might have claimed on the survey to be honest
- B. some generally honest people taking the survey might have claimed on the survey to be dishonest
- C. some people who claimed on the survey to be at least a little dishonest may be very dishonest
- D. some people who claimed on the survey to be dishonest may have been answering honestly
- E. some people who are not job applicants are probably at least a little dishonest

A is the best answer.

If applicants who are in fact dishonest claimed to be honest, the survey results would show a smaller proportion of dishonest applicants than actually exists. Therefore, this choice is the best answer. B is inappropriate because generally honest applicants who claimed to be dishonest could contribute to the overestimation, but not to the underestimation, of dishonest applicants. D is inappropriate because applicants who admitted their dishonesty would not contribute to an underestimation of the proportion of dishonest applicants. C and E are inappropriate because the argument is concerned neither with degrees of dishonesty nor with the honesty of non-applicants.

Q17 Samuel is obviously a bad fisherman. During the past season, in which he and the five members of his team spent four months on a boat together off Dutch Harbor, AK, he caught fewer fish than any of his teammates.

Which of the following strategies would be most likely to minimize Company X's losses on the policies?

-
- A Two seasons ago, Samuel fished on another boat off Dutch Harbor and caught more fish than any other member of that boat.
- B Before becoming a fisherman, Samuel piloted a fishing boat whose members regularly caught record numbers of fish.
- C While fishing this past season, Samuel fell sick for a week and did not catch any fish during this time.
- D Unlike the other fishermen on his boat, at the order of the captain, Samuel fished this past season with experimental bait.
- E Amongst the fishing community in Dutch Harbor, Samuel has a reputation for being an especially bad fisherman.

Correct Answer: **D**

This answer highlights something that made Samuel's fishing performance uniquely different than his teammates. Moreover, Samuel did not make the choice to fish with alternative bait--his captain ordered him to do it. If Samuel made the choice to fish with alternative bait, it would be his poor fishing judgment that would be at fault. Similarly, the answer makes clear that no other fisherman on Samuel's boat faced the same predicament.

- Q18 Eating beets significantly lowers the risk of cancer, according to an article in a nutritional magazine. The article refers to a study that found that people who consumed one or more beets per day were half as likely to be diagnosed with the disease as people who did not.

Which of the following, if true, most weakens the argument in the magazine article?

-
- A Another study found that people who consumed one tablespoon of flax seed oil per day were more than four times less likely to be diagnosed with cancer as those who did not.
 - B Participants in the study reported consuming no vegetables other than beets.
 - C The study was only conducted in one city.
 - D In another experiment, cancer patients who ate one or more beets per day were no more likely to recover than those who ate no beets.
 - E The participants in the study who ate beets were more likely to exercise regularly than those who did not eat beets.

Correct Answer: E

The article draws a conclusion on the basis of the findings of a single study. However, the link between eating beets and cancer prevention cannot be verified without ruling out other variables. If the participants who ate beets were also similar in another way that distinguished them from the group that did not, it would become impossible to prove that beets - and not the other factor - were responsible for reducing the risk of cancer on the basis of this study alone.

- A. The effectiveness of flax seed oil in reducing the risk of cancer has no bearing on the effectiveness of beets in doing so. This answer is off topic.*
 - B. This answer strengthens, rather than weakens, the argument. If the subjects ate only beets and no other vegetables, there is more evidence for the fact that beets – and no other vegetable – were responsible for reducing the risk of cancer.*
 - C. The study would be more convincing if it had been conducted in more than one city. However, this fact alone does not do the most to weaken the argument.*
 - D. This other experiment is about the role of beets in the recovery rates of cancer patients, rather than in the risk of diagnosis. Therefore, it does not weaken the conclusion of the article, which focuses on cancer prevention, not recovery.*
-

E. Because study participants who ate beets were also more likely to exercise regularly than those who did not eat beets, it is impossible to determine whether beets or regular exercise were more influential in preventing cancer. This is the correct answer.

Q19 The cost of producing radios in Country Q is ten percent less than the cost of producing radios in Country Y. even after transportation fees and tariff charges are added, it is still cheaper for a company to import radios from Country Q to Country Y than to produce radios in Country Y.

The statements above, if true, best support which of the following assertions?

- A. labor costs in Country Q are ten percent below those in Country Y.
- B. importing radios from Country Q to Country Y will eliminate ten percent of the manufacturing jobs in Country Y
- C. the tariff on a radio imported from Country Q to Country Y is less than ten percent of the cost of manufacturing the radio in Country Y.
- D. the fee for transporting a radio from Country Q to Country Y is more than ten percent of the cost of manufacturing the radio in Country Q.
- E. it takes ten percent less time to manufacture a radios in Country Q than it does in CountryY.

C is the best answer

If the tariff on importing radios from Country Q to Country Y were as high as ten percent or more of the cost of producing radios in Y, then, contrary to what the passage says, the cost of importing radios from Q to Y would be equal to or more than the cost of producing radios in Y. thus, the tariff cannot be that high, and C is

the best answer. A and E give possible partial explanations for the cost difference, but neither is supported by the passage because the cost advantage in Q might be attributable to other factors. B and D are both consistent with the information in the passage, but the passage provides no evidence to support them.

Q20 Toughened hiring standards have not been the primary cause of the present staffing shortage in public schools. The shortage of teachers is primarily caused by the fact that in recent years teachers have not experienced any improvements in working conditions and their salaries have not kept pace with salaries in other professions.

Which of the following, if true, would most support the claims above?

- A. Many teachers already in the profession would not have been hired under the new hiring standards.
- B. Today more teachers are entering the profession with a higher educational level than in the past.
- C. Some teachers have cited higher standards for hiring as a reason for the current staffing shortage.
- D. Many teachers have cited low pay and lack of professional freedom as reasons for their leaving the profession.
- E. Many prospective teachers have cited the new hiring standards as a reason for not entering the profession.

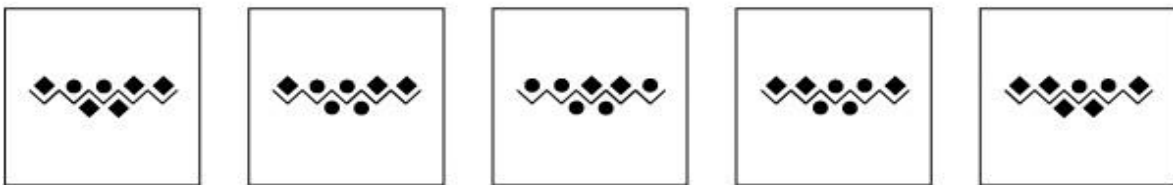
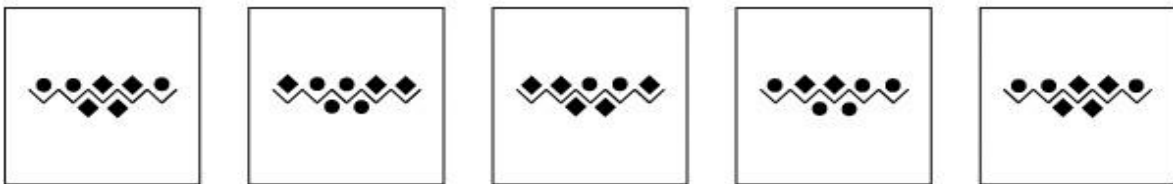
D is the best answer

The passage rejects one explanation of the shortage of teachers—that it results from toughened hiring standards—and advances an alternative—that it results from deficiencies in pay and working conditions. D provides corroborative evidence for the latter explanation by suggesting that, for many former teachers, poor pay and working conditions were reasons for their quitting the profession. Therefore, D is the best answer. A, C and E provide evidence that tends to implicate new hiring standards in the staffing shortage, and thus support the explanation that

the passage rejects. B describes what may be a result of the new hiring standards, but it provides no evidence favoring one explanation of the staffing shortage over the other.

In each question you will be presented with a logical sequence of five figures. You will need to determine which of the possible answers best matches the next figure in the sequence, or which replaces the question mark.

Q21



A

B

C

D

E

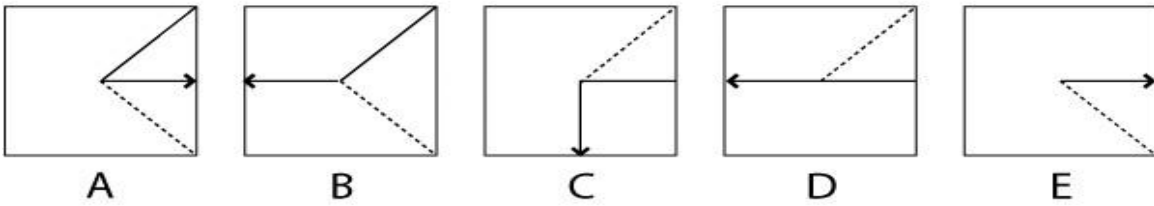
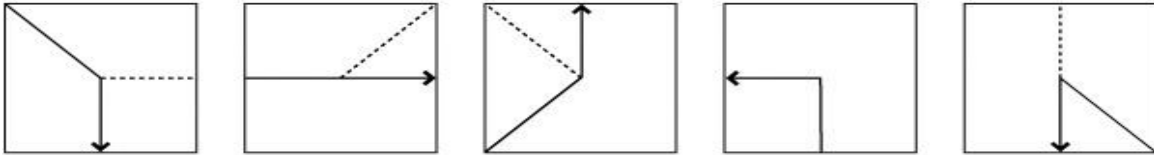
The Right Option is B

Rule 1: The shapes on the top row follow the order: circle, circle, square, square and then repeats.

Rule 2: The shapes on the top row move one place to the right each time.

Rule 3: The shapes on the bottom row alternate between circle and square.

Q22



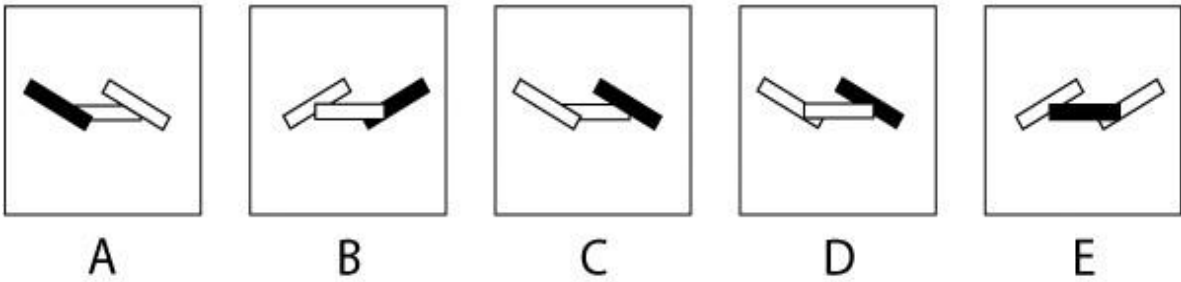
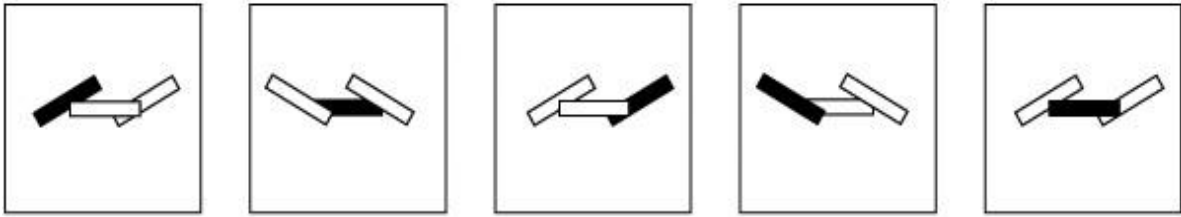
The Right Option is E

Rule 1: The solid line moves one place counterclockwise each time.

Rule 2: The arrow line moves two places counterclockwise each time.

Rule 3: The dotted line moves counterclockwise one place, then two places, then 3 places and so on.

Q23



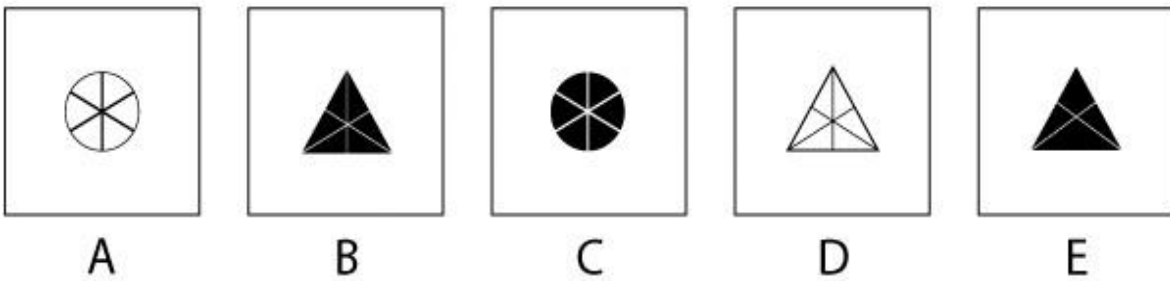
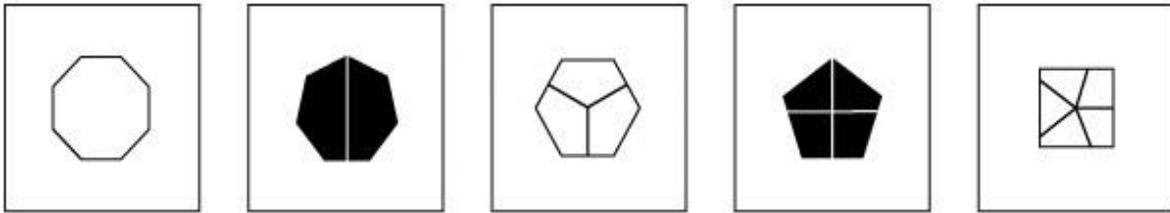
The Correct Option is C

Rule 1: The left and right hand rectangles alternate between pointing NE-SW and NW-SE each time.

Rule 2: The middle rectangle alternates between the foreground and the background.

Rule 3: The shaded block moves one place to the right each time.

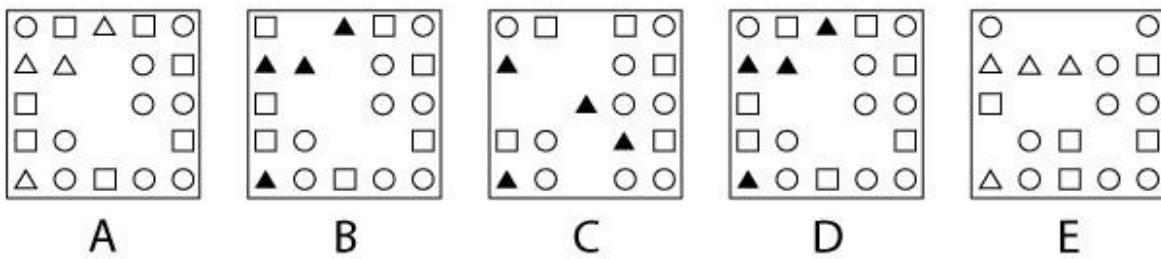
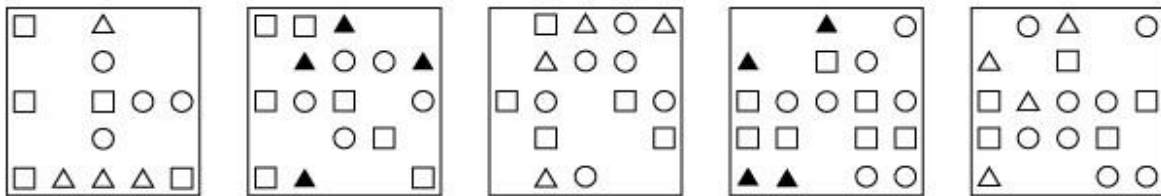
Q24



The Right Option is B

- Rule 1: The total number of edges on the shape decreases by one each time.*
- Rule 2: The total number of segments in each shape increases by one each time.*
- Rule 3: The shape alternates between shaded and unshaded.*

Q25



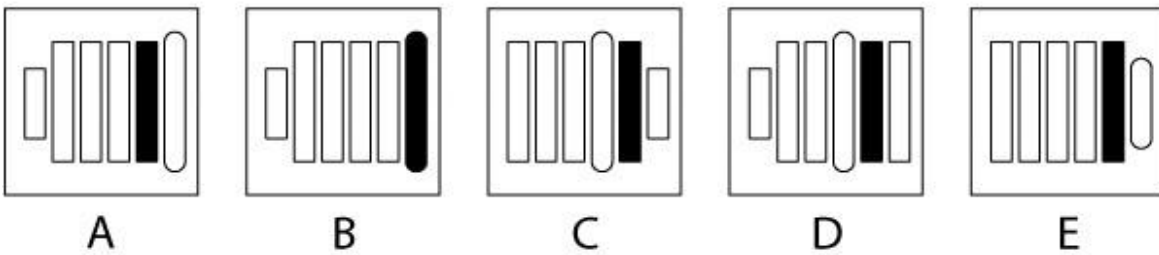
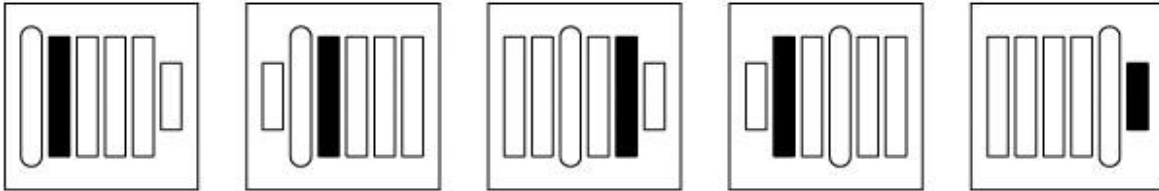
The Right Option is D

Rule 1: The total number of circles increases by one each time.

Rule 2: The triangles alternate between shaded and unshaded.

Rule 3: The total number of squares alternates between 5 and 7.

Q26



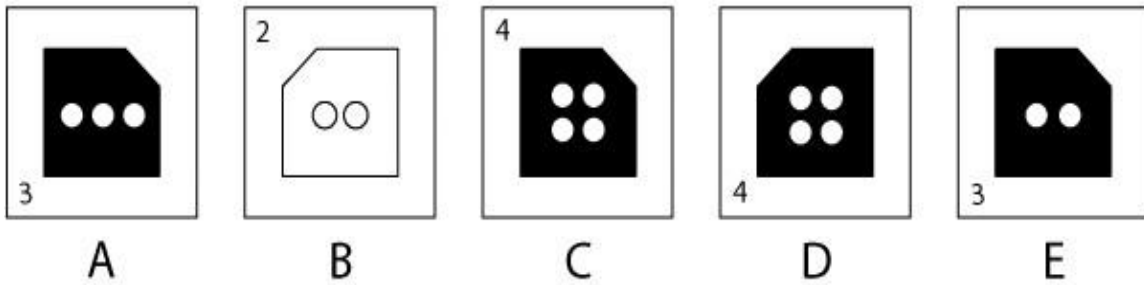
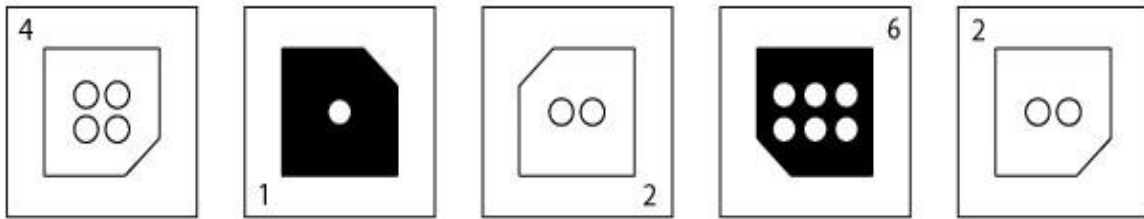
The Right Option is A

Rule 1: The shaded bar moves one place to the right, then two places, then three places and so on.

Rule 2: The rounded corners move one place to the right each time.

Rule 3: The shortened bar alternates between the left and right hand side.

Q27



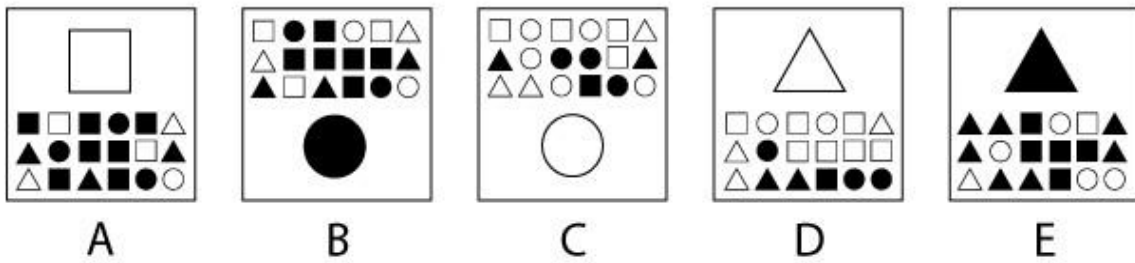
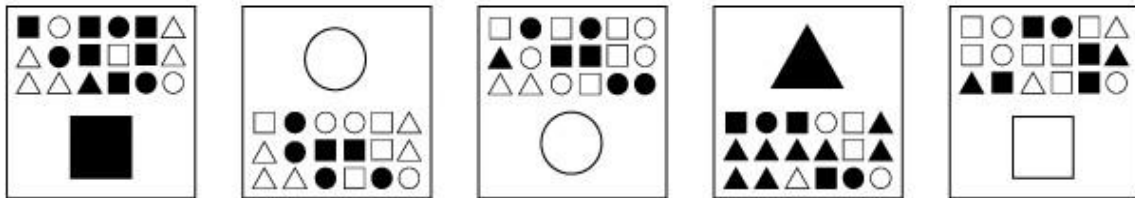
The Right Option is A

Rule 1: The missing edge of the square moves one place counterclockwise each time.

Rule 2: The number moves one place counterclockwise each time, and indicate how many circles are in the square.

Rule 3: The square alternates between shaded and unshaded.

Q28



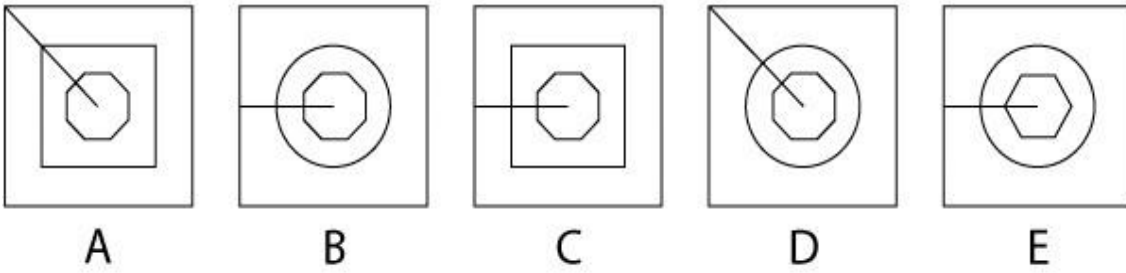
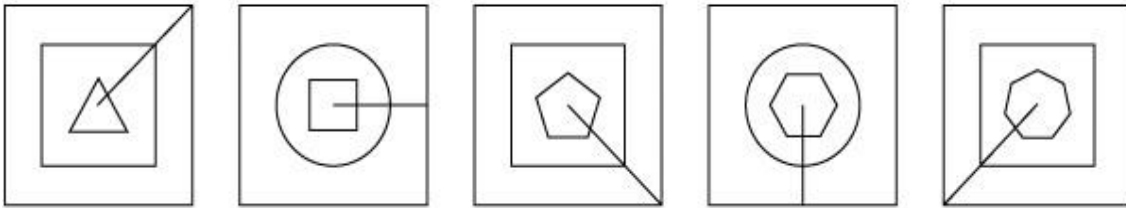
The Right Option is E

Rule 1: The large shape alternates between being at the top and the bottom of the box.

Rule 2: The large shape is the same as which ever small shape is the most frequent.

Rule 3: If more small shapes are shaded than unshaded, then the large shape is also shaded, and vice versa.

Q29



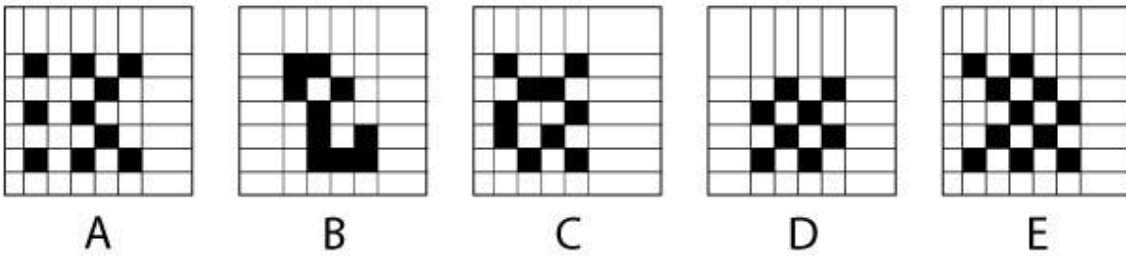
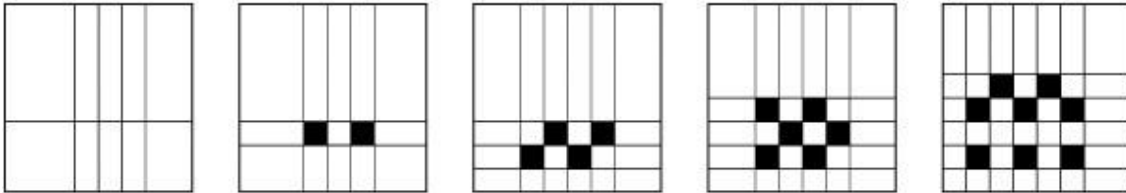
The Right Option is B

Rule 1: The large shape alternates between circle and square.

Rule 2: The total number of edges on the the small shape increases by one each time.

Rule 3: The line rotates one place clockwise each time.

Q30



The Right Option is A

Rule 1: The total number of vertical lines increases by one every two boxes.

Rule 2: The total number of horizontal lines increases by one each time.

Rule 3: The total number of shaded boxes increases by two each time.

In the United Kingdom, shops include the V.A.T (Value Added Tax) on the goods they sell so that the V.A.T amount is incurred by the purchaser of the goods. If the current normal rate of V.A.T in the United Kingdom is 15% on your selling price, solve the following question

Q31 After adding his percentage profit on a Wine drink the value came to £72.00. How much would Frank put as the selling price of the wine drink.

- A. £82.80 B. 85.60 C. 88.60 D. 89.20 E. 89.70

The V.A.T is 15%

Therefore, the Selling Price = $1.15 \times 72 = \text{£}82.80$ (A)

Q32 Charles sold a canerack for £90.00. What was the original price of the canerack before V.A.T was added.

- A. £67.20 B. £77.20 C. £78.20 D. £88.20 E. £89.20

To get the original price of Canerack, divide by the increase of 15%

Original Price = $\text{£}90.00/1.15 = \text{£}78.20$ (C)

Q33 What is the V.A.T amount if a product sold for £84.00.

- A. £10.50 B. £12.60 C. £14.70 D. £15.80 E. £16.90

*Since the V.A.T is 15%. The V.A.T amount = 15% of 84.00
= £12.6*

Q34 The normal cost for a pair of trousers should have been £50.00 but because Mary trying to avoid V.A.T puts the price at?

- A. £43.10 B. £45.50 C. £55.70 D. £57.50 E. £61.10

*Since she wants to avoid V.A.T, the V.A.T payment would be transferred to the buyer. Therefore the Cost = 1.15% of 50
= £57.50 .*

Q35 The original cost of a goods tagged for sale at £120 should have been?

- A. £104.35 B. £106.20 C. £106.40 D. £108.30 E. £108.45

The True Price should have been $120/1.15$
= £104.35

TOTAL SALES (£millions)

| Region | Previous Year | Current Year | Next Year's Projection |
|---------------|---------------|--------------|------------------------|
| Northern | 310 | 310 | 320 |
| Southern | 170 | 160 | 165 |
| Eastern | 290 | 300 | 275 |
| Western | 255 | 280 | 270 |
| Central | 110 | 90 | 125 |

Q36 If the sales projections for next year prove accurate, which region will have maintained or increased sales levels each year from the previous year to next year?

- A. Northern Region
- B. Southern Region
- C. Eastern Region
- D. Western Region
- E. Central Region

Step 1 – Calculate the regional sales for the current year using the table.

Step 2 – Compare the numbers from Step 1 to the figures for the previous year and for next year, as follows;

| <i>Region</i> | <i>Previous</i> | <i>Current</i> | <i>Next Year's</i> |
|-----------------|-----------------|----------------|--------------------|
| <i>Northern</i> | <i>310</i> | <i>310</i> | <i>320</i> |
| <i>Southern</i> | <i>170</i> | <i>160</i> | <i>165</i> |
| <i>Eastern</i> | <i>290</i> | <i>300</i> | <i>275</i> |
| <i>Western</i> | <i>255</i> | <i>280</i> | <i>270</i> |
| <i>Central</i> | <i>110</i> | <i>90</i> | <i>125</i> |

Only the Northern region has maintained sales at 310 for the previous and current year, as well as projecting an increase in sales to 320 for next year.

Thus the correct Answer is (A) Northern region

Q37 What is the absolute difference between the lowest and the highest performing region (to the nearest £million) in the current year?

- (A) £216 million
- (B) £217 million
- (C) £218 million
- (D) £219 million
- (E) £220 million

Step 1 - Calculate the difference between the highest regional sales (Northern) and the lowest regional sales (Central)

$$310 - 90 = £220 \text{ million}$$

Thus the correct Answer is (E) £220 million

Q38 If next year's forecasts are scaled back by a quarter for the Northern and Western region, and by a fifth for the Southern and Eastern regions, what will be the total projected sales for all 5 regions?

- A. £1,155 million
- B. £924 million
- C. £919.50 million

- D. £942 million
E. £866.25 million

Step 1 - Calculate the new regional sales for the 4 regions affected and sum these, as shown in the table below:

| Region | Next Year's Projection | New Projection |
|----------|------------------------|----------------------|
| Northern | 320 | $\times 3/4 = 240$ |
| Southern | 165 | $\times 4/5 = 132$ |
| Eastern | 275 | $\times 4/5 = 220$ |
| Western | 270 | $\times 3/4 = 202.5$ |
| Central | 125 | 125 |
| TOTAL | | 919.50 |

Thus the correct Answer is (C) £919.50 million

Q39 What were the ratios for the Central: Eastern regional sales for the Previous Year compared to the Current Year?

- A. 9:30 (Previous Year); 3:11 (Current Year)
B. 20:50 (Previous Year); 3:11 (Current Year)
C. 10:30 (Previous Year); 5:11 (Current Year)
D. 11:29 (Previous Year); 3:10 (Current Year)
E. 5:11 (Previous Year); 11:29 (Current Year)

Step 1 – Put the Previous Year's sales for these regions into a ratio 110:290

Step 2 – Put the Current Year's sales for these regions into a ratio 90:300

Step 3 – Simplify these ratios by dividing by the highest common denominator 11:29 for Previous Year (after division by 10) 3:10 for Current Year (after division by 30)

Thus the correct answer is (D) 11:29 (Previous Year); 3:10 (Current Year)

Q40 Put the regions in increasing order of total combined sales for the current year and next year's projection

- A. 2005, 2007
- B. 2006, 2008
- C. 2007, 2008
- D. 2008, 2005
- E. 2009, 2005

Step 1 - Calculate the totals for each region, as follows:

| | <i>Current Year</i> | <i>Next Year</i> | <i>Total</i> |
|-----------------|---------------------|------------------|--------------|
| <i>Northern</i> | <i>310</i> | <i>320</i> | <i>630</i> |
| <i>Southern</i> | <i>160</i> | <i>165</i> | <i>325</i> |
| <i>Eastern</i> | <i>300</i> | <i>275</i> | <i>575</i> |
| <i>Western</i> | <i>280</i> | <i>270</i> | <i>550</i> |
| <i>Central</i> | <i>90</i> | <i>125</i> | <i>215</i> |

Thus the correct answer is (A) Central, Southern, Western, Eastern, Northern

| Consolidated Income Statements (£millions) | Competitor A | Competitor B | Competitor C |
|--|--------------|--------------|--------------|
| Revenue | 580 | 632 | 600 |
| Gross profit | 128 | 148 | 147 |
| Operational profit | 108 | 128 | 131 |
| Profit before tax | 90 | 112 | 117 |
| Corporation tax* | -27 | -33.6 | -35.1 |
| Profit after tax | 63 | 78.4 | 81.9 |

*Tax = 30%

Q41 If Profit before tax increases by 15% for Competitor B and decreases by 8% for Competitor A, what is the difference between Competitor A and Competitor B's corporation tax payments (to the nearest £million)?

- A. £10 million
- B. £12 million
- C. £14 million
- D. £16 million
- E. £18 million

Tip: Don't be caught out by the fact that the question lists Competitor B first, when you might be expecting to see Competitor A then Competitor B. This is intended to throw those not paying attention.

Step 1 – Add 15% to Competitor B's profit before tax $112 \times 115\% = 128.8$

Step 2 – Decrease Competitor A's profit before tax by 8% $90 \times 92\% = 82.8$

Step 3 - Calculate the difference in corporation tax (at 30%) $(128.8 - 82.8) \times 30\% = 13.8 = \text{£}14 \text{ million (to the nearest £million)}$

Thus the correct answer is (C) £14 million

Q42 Competitor B and Competitor C choose to declare their Revenues in \$ and Euros respectively. What are these figures? (Use the exchange rates $1\text{£} = \$1.66$; $1\text{£} = 1.15$).

- A. \$1,043 million (Competitor B); 708 million (Competitor C)
- B. \$1,049 million (Competitor B); 690 million (Competitor C)
- C. \$1,049 million (Competitor B); 720 million (Competitor C)
- D. \$720 million (Competitor B); 1,055 million (Competitor C)
- E. Can't tell from the data provided

Step 1 – Calculate Competitor B revenue in \$ $632 \times 1.66 = \$1,049$

Step 2 – Calculate Competitor C revenues in Euros $600 \times 1.15 = 690$

Thus the correct answer is (B) \$1,049 million (Competitor B); 690 million (Competitor C)

Q43 What would be the difference in Euros if Competitor A used an exchange rate of $1\text{£} = 1.20$, rather than $1\text{£} = 1.15$, when calculating its Profit after tax?

- A. 0.05 million
- B. 1.15 million
- C. 2.05 million
- D. 3.05 million
- E. 3.15 million

Step 1 – Calculate the difference in the exchange rate $1.20 - 1.15 = 0.05$

Step 2 – Calculate the difference in Euros $0.05 \times 63 = 3.15$ million

Thus the correct answer is (E) 3.15 million

Q44 What was the average Gross profit across the 3 competitors (to the nearest £10million)?

- A. £140 million
- B. £141 million
- C. £142 million
- D. £143 million
- E. £144 million

Step 1 – Calculate the total Gross Profit $128 + 148 + 147 = 423$

Step 2 – Calculate the average $423 / 3 = 141$

Step 3 – To the nearest £10million = £140 million

Thus the correct answer is (A) £140 million

Q45 Competitor C moves to a country charging 15% corporation tax and corporation tax falls to 22% for Competitors A and B. What is the total corporation tax payable for the 3 competitors (based upon the Profit before tax figures shown)?

- A. £62 million
- B. £46 million
- C. £26 million
- D. £25 million
- E. Can't tell from data

Step 1 – Calculate the corporation tax payable for each competitor

Competitor A = $90 \times 22\% = 19.8$

Competitor B = $112 \times 22\% = 24.6$

Competitor C = $117 \times 15\% = 17.6$

Step 2 – Calculate the total corporation tax payable $19.8 + 24.6 + 17.6 = \text{£}62$ million

Thus the correct answer is (A) $\text{£}62$ million

| | 2006 | 2007 | 2008 | 2009 | 2010 |
|--------------------------------|------------|------------|------------|------------|------------|
| | (£million) | (£million) | (£million) | (£million) | (£million) |
| Adjusted earnings | 1.02 | 1.05 | 0.95 | 0.98 | 1.11 |
| Cash flow | 1.32 | 1.42 | 1.34 | 1.25 | 1.53 |
| Attributable profit | 1.95 | 2.11 | 1.93 | 1.88 | 2.23 |
| Average profit (per 500 units) | £250 | £325 | £175 | £200 | £300 |
| Average sales price (per unit) | £4.50 | £4.65 | £4.30 | £4.15 | £4.60 |

Q46 From 2006 to 2007 Attributable profit increased at double the percentage rate as it did between 2005-2006. What was the Attributable profit figure for 2005?

- A. £0.23 million
- B. £1.03 million
- C. £1.83 million
- D. £1.87 million
- E. £2.03 million

Step 1 – Calculate the 2005-2006 rate of Attributable profit increase Rate between
 $2006-2007 = 2.11 / 1.95 = 8.2\%$ increase
 Rate between 2005-2006 = $8.2 / 2 = 4.1\%$ increase

Step 2 – Calculate the Attributable profit figure for 2005 $1.95 \times 1.041 = 1.87$ (£million)

Thus the correct answer is (D) £1.87 million

Q47 If the target was to have an average profit (per unit) in excess of 50p, in which year or years was this achieved?

- A. 2006 B. 2006 & 2007 C. 2010 D. 2007 and 2010 E. 2006, 2007 & 2010

Step 1 - Calculate the average profit (per unit) as follows:

| 2006 | 2007 | 2008 | 2009 | 2010 |
|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| £250 | £325 | £175 | £200 | £300 |
| $£250 / 500 =$ £0.50 | $£325 / 500 =$ £0.65 | $£175 / 500 =$ £0.35 | $£200 / 500 =$ £0.40 | $£300 / 500 =$ £0.60 |

Note the question asks for "in excess of 50p". So in 2006 where the profit was exactly 50p, this does not satisfy the requirement.

Thus the correct answer is (D) 2007 and 2010

Q48 In 2011, if Adjusted earnings increase by an eighth and there is a 2:3 ratio of (2011 Adjusted earnings: 2011 Cash flow), what will be the Cash flow in 2011?

- A. £2.14 million
 B. £1.87 million
 C. £1.25 million
 D. £0.83 million
 E. £0.14 million

Step 1 – Calculate the 2011 Adjusted earnings $1.11 \times 1 \frac{1}{8} = 1.249$

Step 2 – Calculate the 2011 Cash flow Adjusted earnings : Cash flow =
 $2:3$ Cash flow = $1.249 \times \frac{3}{2} = 1.87$

Thus the correct answer is (B) £1.87 million

Q49 Which year had the lowest ratio of Adjusted earnings to Attributable profit?

- A. 2006
- B. 2007
- C. 2008
- D. 2009
- E. 2010

Step 1 - Calculate the ratio for each year as shown in the table below;

| | 2006 | 2007 | 2008 | 2009 | 2010 |
|---|----------------|----------------|----------------|----------------|----------------|
| <i>Adjusted earnings/ Attributable profit</i> | = 1.02/1.95 | = 1.05/2.11 | = 0.95/1.93 | = 0.98/1.88 | = 1.11/2.23 |
| | = 0.52 | = 0.498 | = 0.492 | = 0.52 | = 0.50 |

Thus the correct answer is (C) 2008

Q50 Which year from 2007 onwards showed the greatest percentage change in Cash flow compared to the preceding year?

- A. 2006
 - B. 2007
 - C. 2008
 - D. 2009
 - E. 2010
-

Step 1 – Calculate the % change in cash flow for each year

| 2007 | 2008 | 2009 | 2010 |
|-----------------------|-----------------------|-----------------------|-----------------------|
| 1.42 / 1.32 | 1.34 / 1.42 | 1.25 / 1.34 | 1.53/1.25 |
| = 7.58% (increase) | = 5.63% (decrease) | = 6.72% (decrease) | = 22.4% (increase) |

Thus the correct answer is (E) 2010