



Section One Practice Questions

Reasoning & Problem Solving

Questions 1–3:

Earth's climate is influenced by long-term changes in its movement through space. Both the shape of Earth's orbit around the Sun and the angle at which Earth is tilted change gradually over time. These changes are caused largely by gravitational interactions within the solar system. Jupiter and Saturn are particularly important in influencing the shape of Earth's orbit.

Earth rotates around an axis that is tilted rather than perfectly upright. The angle of this tilt, known as the axial tilt, changes over time between approximately 22.1° and 24.5° . The complete cycle from 22.1° to 24.5° and back again takes approximately 41,000 years.

A greater axial tilt produces more pronounced seasonal differences. In summer, the relevant hemisphere is tilted more towards the Sun, while in winter it is tilted further away. However, the effect is not the same everywhere on Earth. Increasing axial tilt generally produces a greater change in solar exposure at higher latitudes, while the effect near the equator is smaller.

When axial tilt decreases, seasonal differences become less pronounced. Reduced solar exposure at high latitudes can also contribute to long-term cooling. If less snow and ice melt during summer, snow and ice can accumulate over successive years, potentially contributing to the development of a glacial period.

Question 1

Earth's axial tilt is currently decreasing towards 22.1° . At the same time, average global temperatures are rising and severe weather events have become more frequent over the past 50 years. Which statement is most consistent with the information in the passage?

- A: Axial tilt is the cause of the current changes in climate.
- B: Climate change is influenced by multiple factors.
- C: The decreasing axial tilt will probably reduce the extent of current climate change.
- D: Human activity is the cause of the current changes in climate.

Question 2

A country located on the equator experiences an increase in Earth's axial tilt. Based on the passage, which outcome would be expected?

- A: Greater exposure to the Sun's rays.
- B: Less severe weather.
- C: Colder summers.
- D: Warmer summers.

Question 3

Earth last reached its maximum axial tilt of 24.5° in approximately 8700 BC. Assuming the pattern described in the passage continues and there are no major changes in climate behaviour, which outcome is most likely?

A: A new ice age may begin around 12,000 AD.

B: Severe weather may reach its maximum frequency in approximately 10,000 years.

C: Earth's orbit will be at its most elliptical in approximately 20,000 years.

D: Mild winters and cool summers will dominate around 22,000 AD.

Questions 4–5:

Six friends are comparing their heights. The following information is known:

- Brian is taller than Sarah.
- Lucy is taller than Conor but shorter than Alan.
- Carol is taller than Brian.
- Sarah is shorter than Alan.

Question 4

Which of the following statements must be true based on the information given?

A: Carol is taller than Sarah.

B: Brian and Sarah are the same height.

C: Alan is the tallest of the six friends.

D: More than half of the friends are taller than Sarah.

Question 5

Which additional piece of information would be sufficient to identify either the tallest or the shortest friend?

A: Lucy is not shorter than Sarah.

B: Alan is not taller than Brian.

C: Lucy is taller than Brian.

D: Lucy and Brian are the same height.

Questions 6–7:

Hugh is considering four cars at a local garage: a Ford, a Honda, an Audi and a BMW. The following information is available:

- The Audi is electric; the other three cars use either petrol or diesel.
- The Ford is blue.
- The BMW and the Honda have air conditioning.
- The red car does not have a reversing camera; all other cars do.
- The black car does not have a towbar; all other cars do.
- No two cars are the same colour.
- The fourth car is yellow.

Question 6

Conor considers air conditioning, a reversing camera and a towbar to be equally valuable. He is risk-averse and would prefer to be certain of having at least two of these features rather than risk having only one or none. Based only on the information provided, which car should he choose to minimise his risk?

A: The Ford.

B: The Honda or the BMW.

C: The Audi.

D: It makes no difference which car he chooses.

Question 7

Before looking at the cars, which single question would give Hugh enough information to determine which car he should buy?

A: Which make of car has no towbar?

B: What colour is the Audi?

C: Which car is red?

D: Which car is yellow?

Section Two Practice Questions

Interpersonal Understanding

Questions 1–4:

Lisa is sitting in class when the teacher begins a serious discussion about plagiarism. He explains how serious an offence it is and the consequences it can have. Lisa listens only vaguely, as her mind is occupied with other things, such as what she is going to wear when she goes out that evening.

The teacher then focuses his attention on Lisa while discussing the most recent assignment the class had to submit. Lisa immediately becomes more attentive when she notices the other students looking at her. She turns bright red as everyone stares, although she has no idea why the teacher has singled her out.

Lisa finds the whole situation strange. She has always been honest about her work and cannot understand why the teacher would focus on her during a discussion about plagiarism. Although she is angry, she remains silent with her arms crossed, knowing that this is not the appropriate time to speak up.

After class, Lisa approaches the teacher and asks why he singled her out and how he could possibly think she was capable of plagiarism. He tells her that he knows she copied her friend Philip's work for the most recent assignment.

For a few seconds, Lisa is completely speechless. The teacher has always been supportive of her, and she has always worked hard in his class. Unsure of how to respond, she walks away.

Lisa then goes to find her best friend, Philip, and tells him what happened. Philip looks down at the ground. Suddenly, everything becomes clear to Lisa: Philip was the one who copied her work and submitted it as his own.

Philip apologises repeatedly and says that he will speak to the teacher and explain that it was his fault. Lisa slowly shakes her head and walks away.

Question 1

From the beginning to the end of the dialogue, Mary evolves from being

A. Happy to sad

- B. Light hearted to frustrated
- C. Cheerful to angry
- D. Unconcerned to annoyed

Question 2

Alex's overall tone is best described as

- A. Disrespectful
- B. Accusatory
- C. Critical
- D. Annoyed

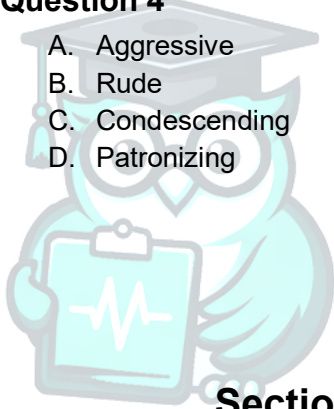
Question 3

What does Mary feel by the end of the dialogue?

- A. That all young people are bad
- B. That more young people are lacking manners compared to her youth
- C. That young people don't care about anyone but themselves
- D. That all young people are rude

Question 4

- A. Aggressive
- B. Rude
- C. Condescending
- D. Patronizing

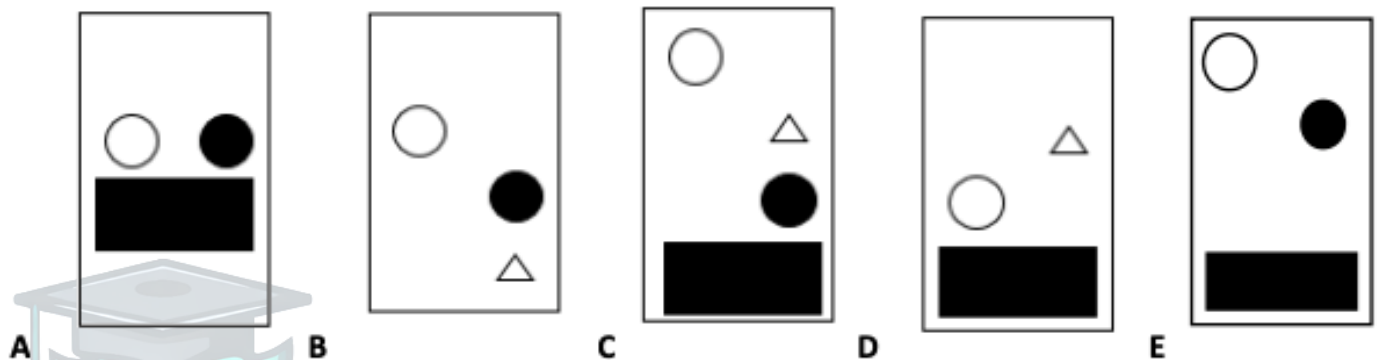
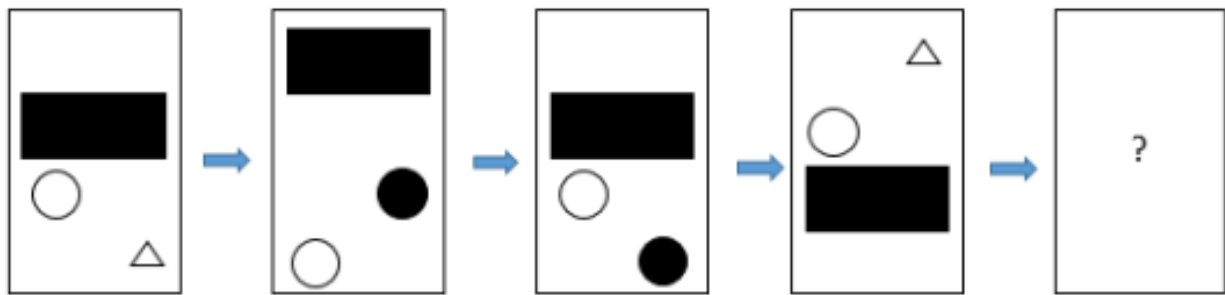


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Section Three Practice Questions and Solutions

Non-Verbal Reasoning

Questions 1 Next in Series



There are four steps/positions each shape can be in

Black rectangle: Moves by one step each time, initially upwards but then hits the top and comes back down so will be at the bottom in the answer

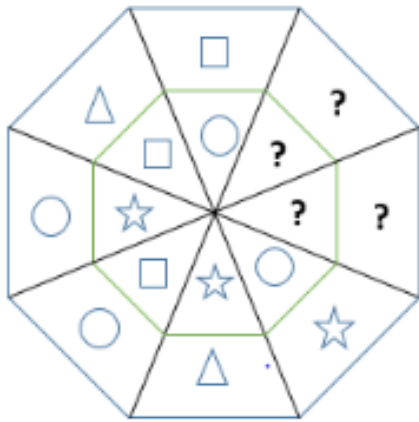
White triangle: Same rule as black rectangle, although obscured for most of it so will be at the same position as it was in the third of the sequence in the answer

Black circle: Same logic but starts downwards, in answer will be same position as it was in first in the sequence. Obscures the white triangle

White circle: Same logic as black circle and hits the bottom and moves up so will be at the top in the answer.

Answer is E

Questions 2 Missing segments:



A

B

C

D

E

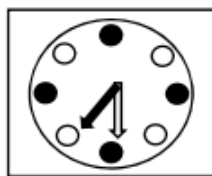
The octagon is split into a top and bottom half and no shapes can be repeated either outside or inside. Outside in top half we have circle, triangle, square and so star is missing. Inside we have square, star, circle and so triangle is missing. Same logic used for bottom half.

Answer is A

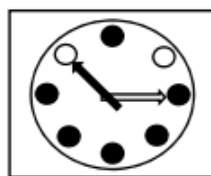
Questions 3 Middle of Sequence:



A



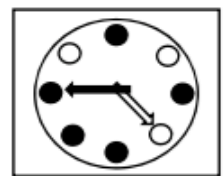
B



C



D



E

Pattern is ADCEB: The white arrow moves one step clockwise each time, while the black arrow moves one step anticlockwise each time. The dots decrease in number (apart from the first change where they remain constant as the arrows are still pointing to the same numbers).

Answer is C

Section One Solutions

Answer: C

A: As the axial tilt is reducing, the climate should be becoming more moderate, with warmer winters, cooler summers and less severe weather events. This is not happening.

B: While climate change is multifactorial, however this is not mentioned in the piece and is therefore incorrect.

C: **Correct** – The current axial tilt cycle should lead to less severe weather events and milder weather.

D: Incorrect – There is no mention of human activity or other factors impacting climate change in the paragraph.

2

Answer: C

While increased tilt leads to overall hotter summers for the hemispheres, countries on the equator move further away from the Sun as the tilt increases. Therefore, their summers will be colder. They will have less exposure to the Sun's rays, resulting in cooler summers and cooler winters, as well as potentially more severe weather

3

Answer: A

The cycle from 21 to 24 degrees and back to 21 degrees takes 41,000 years. Therefore, going from 21 to 24 degrees takes 20,500 years.

The last extreme (24 degrees) was just over 10,000 years ago. Therefore, Earth is currently around the midpoint between 21 and 24 degrees.

In another 10,000 years, the tilt will be at its minimum (12,000 AD). This could precipitate an ice age, as outlined above. There will be moderate weather, with cool summers, warm winters and less severe weather.

There is no mention of a relationship between tilt and orbital patterns. Likewise, there is no timeline given for orbital patterns. In 22,000 years, Earth will be midway between 21 and 24 degrees.

4

Answer: D

Ca > B > S

A > S

A > L > C

Ca, B and A are all taller than S.

L and C could be taller, shorter or the same height as S. In any case, at least 3 out of Sarah's 5 friends are taller than her.

5

Answer: B

If Alex is not taller than Brian, then he is shorter than Carol. Therefore, Carol has to be the tallest.

6

Answer: B

Both the Honda and the BMW have AC. If he chooses one of these, it must be red, black or yellow.

If it is red or black, he will get either a reversing camera or a towbar. If it is yellow, he will get both.

He is therefore guaranteed 2 features, with a chance of getting all 3. With the Audi, he can get a maximum of 2 features but risks getting only 1. With the Ford, he is guaranteed exactly 2 features.

7

Answer: D

The yellow car will have a reversing camera and a towbar. If it is the Honda or the BMW, then it will have all 3 features. If it is the Audi, then all 4 cars will have 2 features, so there is no difference between them.

Section Two Practice Solutions

Questions 1–4

1. Answer: C

A: In the first part of the passage, Lisa is unaware that Philip copied her work, so she has no reason to feel guilty. She may feel ashamed because everyone in the class is looking at her.

B: While “perplexed” is accurate, Lisa does not understand what is happening, so there is no indication that she feels sad.

C: **Correct** – Lisa is embarrassed because everyone is staring at her, but she is confused about why the teacher is focusing on her.

D: Lisa is more confused than annoyed by what is happening.

2. Answer: B

A: She is not enraged; she is more confused and upset by the accusation.

B: **Correct** – The teacher has always been supportive of Lisa, so she feels betrayed that he would even think she had plagiarised someone else’s work.

C: She may feel sad, but “betrayed” is a more accurate description of her feelings.

D: She may also feel disappointed, but “betrayed” more accurately captures how she feels towards her teacher.

3. Answer: A

A: **Correct** – Philip feels guilty because he knows that his actions caused Lisa to get into trouble.

B: Philip is likely to feel awkward as well, but guilt is the stronger and more obvious emotion.

C: Philip admits that he made the mistake, so he is not being defensive.

D: There is little evidence to suggest that Philip feels judged.

4. Answer: D

A: There is no mention of Lisa feeling like crying, so this cannot be assumed.

B: We cannot assume that Lisa intends to go to the teacher and tell him what happened, especially as this would mean reporting her best friend.

C: Lisa has no reason to feel embarrassed, as she was not the one who plagiarised the work.

D: **Correct** – Her best friend deceived and betrayed her by copying her work without her knowledge, so Lisa is understandably disappointed in him and does not know how to respond.



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