

Online Admission Test – Sample questions

1. Quantitative exercises

12 workers can assemble a product batch in 8 hours.

If 16 workers do the same work at the same productivity, how long will it take?

- A. 5 hours
- B. 6 hours
- C. 7 hours
- D. 8 hours

Answer: B. 6 hours

Explanation:

Work = workers × time

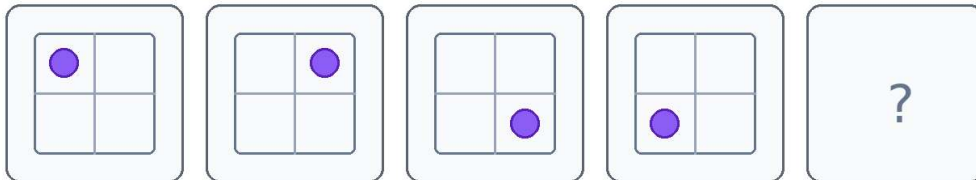
$12 \times 8 = 96$ worker-hours

$96 \div 16 = 6$ hours

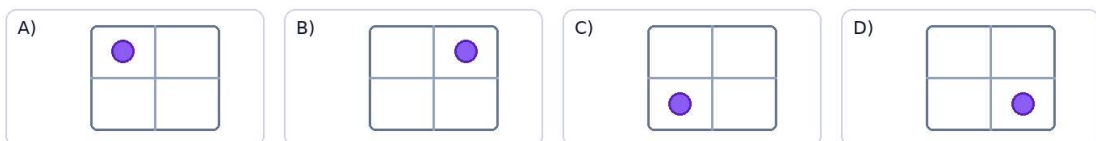
2. Logical reasoning/Figural problems

Problem 3

A dot moves through the panels. Which option comes next?



Options:



Correct answer

A

Estimated time

1 minute

Explanation: The dot moves clockwise through the four positions of the 2×2 grid: top left → top right → bottom right → bottom left. The next step returns to the top-left position.

3. Text analysis

Topic: Demographics and pension systems | Suggested time: 3 minutes

A pension system financed by current workers is under pressure as the population ages. Commentators sometimes describe the problem as a sudden collapse caused by people living longer. Demographers object that the issue has been developing for decades through two trends: rising life expectancy and lower birth rates. Because both trends change the ratio of workers to retirees, a system built for a younger population becomes harder to finance. The demographers therefore argue that the challenge is structural rather than temporary.

Which statement is best supported by the text?

- A. The passage indicates that ageing pressures come only from increasing longevity, not from fertility trends.
- B. The demographers see pension strain as a long-term change in population structure.
- C. The text argues that pay-as-you-go pension systems become easier to finance as the share of retirees rises.
- D. The commentators and the demographers agree that the problem is a short-lived shock.

Correct answer: B

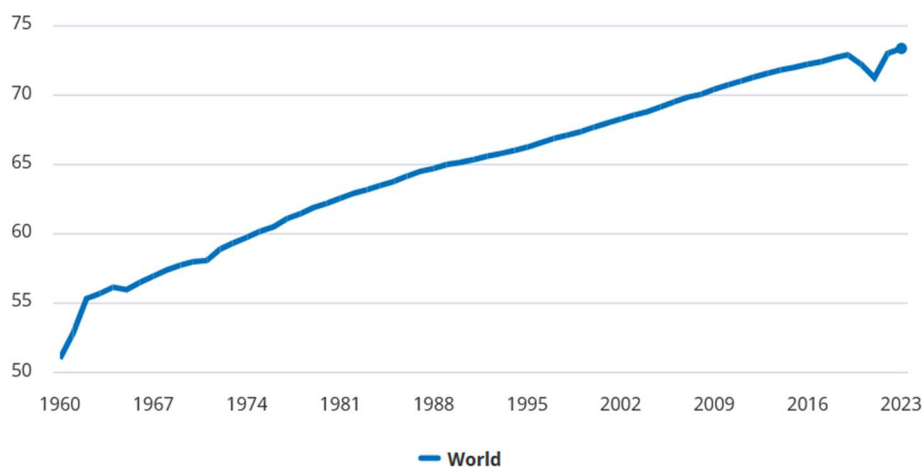
Difficulty: Medium | Suggested time: 3 minutes

Explanation: The passage states that both longer lives and lower birth rates have altered the worker-to-retiree ratio over time. This is precisely a structural demographic change.

4. Graphs and Tables

Life expectancy at birth, total (years)

Most recent values (1960 - 2023), Years



Dataset: [World Development Indicators \(WDI\)](#)

Source: [World Population Prospects, United Nations \(UN\)](#); Statistical databases and publications from national statistical offices, National statistical offices; Demographic Statistics, Eurostat (ESTAT)

Approximately what was the global life expectancy at birth in 1960?

- A. About 45 years
- B. About 51 years
- C. About 60 years
- D. About 65 years

Answer: B. About 51 years

Which statement best describes the overall global trend in life expectancy between 1960 and 2023?

- A. Life expectancy steadily decreased
- B. Life expectancy remained almost unchanged
- C. Life expectancy increased significantly overall
- D. Life expectancy fluctuated without a clear trend

Answer: C. Life expectancy increased significantly overall

Around which year does the graph show a noticeable temporary decline in life expectancy before increasing again?

- A. Around 1990
- B. Around 2000
- C. Around 2020
- D. Around 1975

Answer: C. Around 2020

Explanation: Linked to the global COVID-19 pandemic.

True / False 1

Global life expectancy increased by more than 20 years between 1960 and 2023.

Answer: True

Explanation:

Start \approx 51 years

End \approx 73 years

Increase \approx 22 years

True / False 2

Global life expectancy increased every single year without any decline between 1960 and 2023.

Answer: False

Explanation: There is a noticeable drop around 2020–2021.

True / False 3

By 2010, global life expectancy had already reached about 70 years.

Answer: True