

MathWorks Placement Papers 2026

15 MCQs with answer key · Free download

Questions

Q1. [CS Fundamentals] Average time complexity of binary search on a sorted array is: [MathWorks paper]

- A) $O(\log n)$
- B) $O(n)$
- C) $O(1)$
- D) $O(n \log n)$

Q2. [CS Fundamentals] Which data structure is best for LRU cache? [MathWorks paper]

- A) HashMap + Doubly Linked List
- B) Array only
- C) Binary heap only
- D) Queue only

Q3. [Reasoning] You have 3 boxes: apples, oranges, apples&oranges - all labeled wrong. You pick one fruit from the box labeled apples&oranges. It is an apple. Correct labels? [MathWorks paper]

- A) apples; oranges; apples&oranges respectively after remapping
- B) Cannot determine
- C) All stay wrong
- D) Only apples correct

Q4. [Quantitative] HCF of 9 and 17 is:

- A) 1
- B) 153
- C) 9
- D) 17

Q5. [Quantitative] Convert to passive voice: "The teacher explained the lesson."

- A) The lesson was explained by the teacher
- B) Data inadequate
- C) None of these
- D) Cannot be determined

Q6. [Quantitative] HCF of 15 and 2 is:

- A) 1
- B) 30
- C) 15
- D) 2

Q7. [Quantitative] HCF of 13 and 7 is:

- A) 1
- B) 91
- C) 13
- D) 7

Q8. [Quantitative] HCF of 4 and 17 is:

- A) 1
- B) 68
- C) 4
- D) 17

Q9. [Quantitative] HCF of 5 and 19 is:

- A) 1
- B) 95
- C) 5
- D) 19

Q10. [Quantitative] HCF of 21 and 4 is:

- A) 1
- B) 84
- C) 21
- D) 4

Q11. [Quantitative] HCF of 3 and 14 is:

- A) 1
- B) 42
- C) 3
- D) 14

Q12. [Quantitative] HCF of 2 and 8 is:

- A) 2
- B) 8
- C) 4
- D) 5

Q13. [Quantitative] Compound Interest - Yearly vs Half-Yearly

- A) $1-196$ (approximately)
- B) 1^2 (approximately)
- C) 1^{204} (approximately)
- D) $1^{3.93}$ (approximately)

Q14. [Quantitative] HCF of 11 and 4 is:

- A) 1
- B) 44
- C) 11
- D) 4

Q15. [Quantitative] HCF of 12 and 16 is:

- A) 4
- B) 48
- C) 12
- D) 16

Answer Key & Explanations

Q1. A

Halves search space each step.

Q2. A

$O(1)$ lookup + $O(1)$ move-to-front.

Q3. A

Classic Google/Microsoft puzzle pattern: labeled mixed is actually apples.

Q4. A

$\gcd(9,17)=1$.

Q5. A

Passive voice: "The lesson was explained by the teacher."

Q6. A

$\gcd(15,2)=1$.

Q7. A

$\gcd(13,7)=1$.

Q8. A

$\gcd(4,17)=1$.

Q9. A

$\gcd(5,19)=1$.

Q10. A

$\gcd(21,4)=1$.

Q11. A

$\gcd(3,14)=1$.

Q12. A

$\gcd(2,8)=2$.

Q13. D

Correct answer: 13.93 (approximately)

Q14. A

$\gcd(11,4)=1$.

Q15. A

$\gcd(12,16)=4$.