Product title: Mathematics MCQ for Eleven Plus - HCF & LCM Topic Sample Sheet 1.pdf

Contents: Mathematics Sample Test

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Questions

1. The HCF and LCM of two numbers are 9 and 360 respectively. If one number is 45, find the other number.

A: 72

B: 81

C: 84

D: 90

2. If the HCF of two numbers is 7 and their LCM is 693, find the product of the two numbers.

A: 693

B: 4851

C: 4901

D: 9702

3. Find the least number which when divided by 12, 16, 20, and 24 leaves a remainder 8 in each case.

A: 232

B: 248

C: 488

D: 504

4. If the HCF of two numbers is 18 and their LCM is 1980, and one of the numbers is 180, what is the other number?

A: 198

B: 1980

C: 198 × 2

D: 198 / 2

5. The LCM of fractions 3/5 and 9/10 is:

A: 9/50

B: 9/5

C: 9/10

D: 27/10

6. The product of two positive integers is 864, and their HCF is 12. What is their LCM?

A: 72

B: 108

C: 864

D: 72 × 12

7. If two numbers have no common prime factors, their HCF is:

A: 0

B: 1

C: Equal to their product

D: Equal to their sum

8. Find the least number which is exactly divisible by 15, 20, 36, and 48.

A: 720

B: 1440

C: 2880

D: 3600

9. What is the smallest number which when divided by 35, 56, and 91 leaves the same remainder in each case?

A: 5000

B: 504

C: 3640

D: 560

10. The LCM of two numbers is 120, and their HCF is 10. If one number is 20, the other number is:

A: 50

B: 60

C: 40

D: 70

11. If the LCM of two numbers is 180 and their product is 9000, find their HCF.

A: 45

B: 50

C: 55

D: 60

12. The HCF of $2^4 \times 3^3 \times 5^2$ and $2^3 \times 3^4 \times 7$ is:

A: $2^3 \times 3^3$

B: $2^4 \times 3^3$

C: $2^3 \times 3^4$

D: $2^2 \times 3^2$

13. If the HCF of two numbers is 24 and their LCM is 216, which of the following could be the pair of numbers?

A: 24 and 216

B: 72 and 72

C: 36 and 144

D: 48 and 108

14. If the product of two numbers is equal to the product of their HCF and LCM, then the numbers are:

A: Co-prime

B: Equal

C: Prime

D: Even

15. Three numbers are in the ratio 2:3:4, and their HCF is 12. What is their LCM?

A: 48

B: 72

C: 144

D: 288

16. The greatest number that divides 43, 91, and 183 leaving the same remainder in each case is:

A: 13

B: 7

C: 4

D: 17

17. The HCF of 8, 12, and 20 is:

A: 4

B: 8

C: 2

D: 6

18. If the LCM of two numbers is 495 and their HCF is 5, and one number is 55, find the other.

A: 45

B: 81

C: 90

D: 95

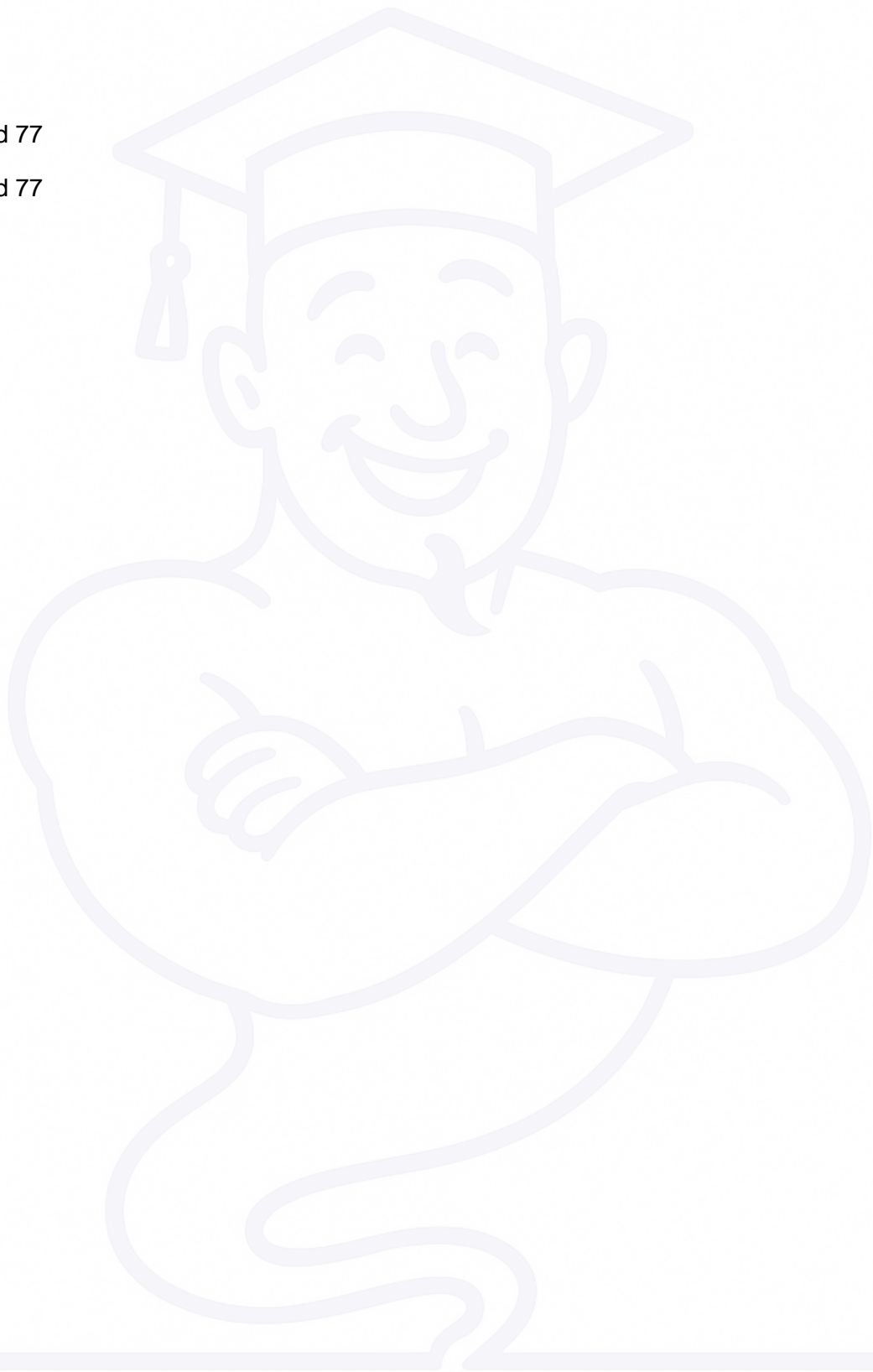**19.** The LCM of 3, 5, 15, and 45 is:

A: 15

B: 45

C: 60

D: 90

20. If the HCF of two numbers is 11 and their ratio is 5:7, then the numbers are:

A: 55 and 77

B: 22 and 44

C: 33 and 77

D: 11 and 77

Answer Sheet

1. A	2. B	3. B	4. A	5. B
6. A	7. B	8. C	9. C	10. B
11. B	12. A	13. A	14. A	15. C
16. C	17. A	18. A	19. B	20. A