

Number Properties: Hard Practice Paper 6

Q1. What is the highest common factor (HCF) of 168 and 252?

- A. 12 B. 28 C. 42 D. 84 E. 126

Q2. What is the lowest common multiple (LCM) of 18 and 24?

- A. 36 B. 54 C. 72 D. 108 E. 432

Q3. Which of these numbers has exactly 8 factors?

- A. 16 B. 24 C. 25 D. 36 E. 49

Q4. A number written as a product of primes is $2 \times 2 \times 3 \times 5 \times 5$. What is the number?

- A. 150 B. 200 C. 300 D. 450 E. 600

Q5. The table lists a claim about each number. Which claim is FALSE?

Number	Claim
51	is a prime number
64	is a square and a cube
91	is 7×13
100	has 9 factors

- A. The claim about 51
B. The claim about 64
C. The claim about 91
D. The claim about 100
E. All the claims are true

Q6. What is the smallest number that must be added to 500 to make a multiple of 18?

- A. 4 B. 6 C. 8 D. 14 E. 16

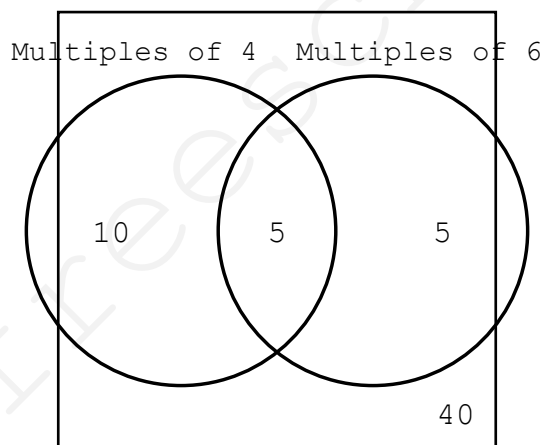
Q7. What is the square root of 1,600?

- A. 20 B. 30 C. 40 D. 80 E. 400

Q8. How many numbers from 1 to 200 are multiples of 7?

- A. 14 B. 21 C. 28 D. 29 E. 35

Q9. The Venn diagram sorts the numbers from 1 to 60. How many of them are a multiple of 4 or a multiple of 6, but not both?



- A. 5 B. 10 C. 15 D. 20 E. 25

Q10. Two numbers have a highest common factor of 12 and a lowest common multiple of 72. One of the numbers is 24. What is the other?

- A. 12 B. 18 C. 36 D. 48 E. 60

Q11. What is the largest prime factor of 210?

- A. 2 B. 3 C. 5 D. 6 E. 7

Q12. A plan of a hall floor measures 96 cm by 72 cm. It is to be covered with identical square tiles, with no tile cut. What is the largest tile that can be used?

- A. 8 cm B. 12 cm C. 18 cm D. 24 cm E. 36 cm

Q13. Three lights flash together at 09:00. They then flash every 12 seconds, every 18 seconds and every 30 seconds. At what time do they next flash together?

- A. 09:01 B. 09:02 C. 09:03 D. 09:05 E. 09:06

Q14. Which of these numbers is a multiple of 11?

- A. 2,332 B. 3,451 C. 4,127 D. 5,215 E. 7,437

Q15. A square number between 300 and 400 is also a multiple of 4. What is it?

- A. 324 B. 336 C. 350 D. 361 E. 380