

UNIT 2 Factors

Mental Tests

M 2.1 Standard Route *(no calculator)*

1. Write down the *smallest* prime number. (2)
 2. Is 49 a prime number? (No)
 3. Write down the factors of 7. (1, 7)
 4. (a) Write down the factors of 10. (1, 2, 5, 10)
(b) Which of these factors are prime numbers? (2, 5)
 5. Is 11 a prime number? (Yes)
 6. Calculate:
 - (a) 3^2 (9)
 - (b) 10^3 (1000)
 - (c) 2^5 (32)
 7. What are the prime factors of 6 ? (2, 3)
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M 2.2 Academic Route *(no calculator)*

1. Write down the first 3 prime numbers. (2, 3, 5)
 2. Is 99 a prime number? (No)
 3. (a) Write down the factors of 16. (1, 2, 4, 8, 16)
(b) Which of these factors are prime numbers? (2)
 4. (a) Write down the factors of 20. (1, 2, 4, 5, 10, 20)
(b) Which of these factors are prime numbers? (2, 5)
 5. What is the HCF of 16 and 20 ? (4)
 6. Calculate:
 - (a) 10^6 (1 000 000)
 - (b) 2^6 (64)
 7. Is 23 a prime number? (Yes)
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UNIT 2 Factors

Mental Tests

M 2.3 Express Route *(no calculator)*

1. Write down the first prime number that is greater than 10. (11)
 2. Is 97 a prime number? (Yes)
 3. Write down the prime factors of 40. (2, 5)
 4. Write down the prime factors of 90. (2, 3, 5)
 5. What is the HCF of 16 and 20? (4)
 6. What is the LCM of 8 and 6? (24)
 7. Is 23 a prime number? (Yes)
 8. Write down 20 as a product of prime factors. ($2^2 \times 5$)
 9. Write down 100 as a product of prime factors. ($2^2 \times 5^2$)
 10. Calculate $10^3 - 1$. (999)
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