



LEAST COMMON MULTIPLE SHEET 2B

For each problem below, write out the **prime factorization** of each number to find the LCM.

1) Find the least common multiple of 6 and 5.

Prime Factorization of 6: 2×3 Prime Factorization of 5: 5

List of prime factors: $2, 3, 5$ No cancelling needed as factors are all different.

The least common multiple is $2 \times 3 \times 5 =$ _____

2) Find the least common multiple of 10 and 4.

Prime Factorization of 10: _____ Prime Factorization of 4: _____

List of prime factors (exponential form): _____ \rightarrow _____

The least common multiple is _____

3) Find the least common multiple of 3 and 6.

Prime Factorization of 3: _____ Prime Factorization of 6: _____

List of prime factors (exponential form): _____ \rightarrow _____

The least common multiple is _____

4) Find the least common multiple of 8 and 10.

Prime Factorization of 8: _____ Prime Factorization of 10: _____

List of prime factors (exponential form): _____ \rightarrow _____

The least common multiple is _____





LEAST COMMON MULTIPLE SHEET 2B ANSWERS

1) Find the least common multiple of 6 and 5.

Prime Factorization of 6: 2×3 Prime Factorization of 5: 5

List of prime factors: $2, 3, 5$ No cancelling needed as factors are all different.

The least common multiple is $2 \times 3 \times 5 = \underline{30}$

2) Find the least common multiple of 10 and 4.

Prime Factorization of 10: 2×5 Prime Factorization of 4: $2 \times 2 = 2^2$

List of prime factors (exponential form): $2^2, 2, 5 \rightarrow 2^2, 5$

The least common multiple is $2^2 \times 5 = 4 \times 5 = \underline{20}$

3) Find the least common multiple of 3 and 6.

Prime Factorization of 3: 3 Prime Factorization of 6: 2×3

List of prime factors (exponential form): $2, 3, 3 \rightarrow 2, 3$

The least common multiple is $2 \times 3 = \underline{6}$

4) Find the least common multiple of 8 and 10.

Prime Factorization of 8: $2 \times 2 \times 2 = 2^3$ Prime Factorization of 10: 2×5

List of prime factors (exponential form): $2^3, 2, 5 \rightarrow 2^3, 5$

The least common multiple is $2^3 \times 5 = 8 \times 5 = \underline{40}$