

1. Given that $P = 2 \times 3^4 \times 5^2$ and $Q = 2^3 \times 3^2 \times 5^4$
write down, as a product of powers of its prime factors,
- (i) the highest common factor (HCF) of P and Q

1.

- (ii) the lowest common multiple (LCM) of P and Q .

1.

2. Given that $A = 2^3 \times 3^2 \times 11$ and $B = 2^2 \times 3^3 \times 11^2$
write down, as a product of powers of its prime factors,

(i) the highest common factor (HCF) of A and B

2.

(ii) the lowest common multiple (LCM) of A and B .

2.

3. Given that $C = 2^3 \times 3^4 \times 7^3 \times 11^2$ and $D = 2^5 \times 3^2 \times 11^3$

write down, as a product of powers of its prime factors,

(i) the highest common factor (HCF) of C and D

3.

(ii) the lowest common multiple (LCM) of C and D .

3.

Answers

1. (i) $2 \times 3^2 \times 5^2$
(ii) $2^3 \times 3^4 \times 5^4$
2. (i) $2^2 \times 3^2 \times 11$
(ii) $2^3 \times 3^3 \times 11^2$
3. (i) $2^3 \times 3^2 \times 11^2$
(ii) $2^5 \times 3^4 \times 7^3 \times 11^3$