

Prime Factors

Without using a calculator, express the following as a product of their prime factors, in index form

56

210

315

360

495

By **listing**, find the Highest Common Factor of the following pairs of numbers

16 and 40

25 and 45

26 and 39

By **listing**, find the Lowest Common Multiple of the following pairs of numbers

18 and 27

16 and 40

25 and 45

The following numbers have been written in index form.

Find the HCF of the following

$$16200 = 2^3 \times 3^4 \times 5^2 \text{ and } 7500 = 2^2 \times 3 \times 5^4$$

$$330 = 2 \times 3 \times 5 \times 11 \text{ and } 2145 = 3 \times 5 \times 11 \times 13$$

$$378 = 2 \times 3^3 \times 7 \text{ and } 384875 = 3^2 \times 5^3 \times 7^3$$

$$a^3 b^2 c^3 \text{ and } a^2 b d^4$$

Find the LCM of the following

$$16200 = 2^3 \times 3^4 \times 5^2 \text{ and } 7500 = 2^2 \times 3 \times 5^4$$

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$$a^3 b^2 c^3 \text{ and } a^2 b d^4$$