**HCF and LCM from Prime Factorisation**

Given that:

$A=2^{3}×5^{4}$ $B=2^{4}×3^{3}×7$

$C=2^{2}×3×5^{3}$ $D=2×3^{5}×5$

$E=3^{2}×5×7^{3}$ $F=2^{2}×7^{3}×11$

$$G=2^{4}×3×5^{2}×13$$

Giving your answers as a product of prime factors, find the highest common factor of:

(a) A and D (b) B and C

(c) D and E (d) C and G

Giving your answers as a product of prime factors, find the lowest common multiple of:

(a) A and C (b) C and D

(c) B and F (d) E and G

Giving your answers as a product of prime factors:

(a) Find the HCF of A, C and D

(b) Find the HCF of C, E and G

(c) Find the LCM of A, C and D

(d) Find the LCM of C, D and G

Giving your answers as a product of prime factors:

(a) Find the HCF of 8A and B

(b) Find the HCF of 5B and E

(c) Find the LCM of C and 10D

(d) Find the LCM of 8D and G

$$H=2^{x}×5^{y}×7^{2}$$

Given that the HCF of $H $and $F$ is $98$ and the LCM of $H$ and $F$ is $2^{2}×5^{3}×7^{3}×11$, find the values of $x$ and $y$.

**HCF and LCM from Prime Factorisation**

Given that:

$A=2^{3}×5^{4}$ $B=2^{4}×3^{3}×7$

$C=2^{2}×3×5^{3}$ $D=2×3^{5}×5$

$E=3^{2}×5×7^{3}$ $F=2^{2}×7^{3}×11$

$$G=2^{4}×3×5^{2}×13$$

Giving your answers as a product of prime factors, find the highest common factor of:

(a) A and D (b) B and C

(c) D and E (d) C and G

Giving your answers as a product of prime factors, find the lowest common multiple of:

(a) A and C (b) C and D

(c) B and F (d) E and G

Giving your answers as a product of prime factors:

(a) Find the HCF of A, C and D

(b) Find the HCF of C, E and G

(c) Find the LCM of A, C and D

(d) Find the LCM of C, D and G

Giving your answers as a product of prime factors:

(a) Find the HCF of 8A and B

(b) Find the HCF of 5B and E

(c) Find the LCM of C and 10D

(d) Find the LCM of 8D and G

$$H=2^{x}×5^{y}×7^{2}$$

Given that the HCF of $H $and $F$ is $98$ and the LCM of $H$ and $F$ is $2^{2}×5^{3}×7^{3}×11$, find the values of $x$ and $y$.