

Solutions to Past Paper Questions – Prime Factors, HCF, LCM

$$\begin{aligned} \text{(e) } 1104 &= 2 \times 552 \\ &= 2 \times 2 \times 276 \\ &= 2 \times 2 \times 2 \times 138 \\ &= 2 \times 2 \times 2 \times 2 \times 69 \\ &= 2 \times 2 \times 2 \times 2 \times 3 \times 23 \end{aligned}$$

So $c = 4$ and $d = 23$

1) (a) $120 = 2 \times 2 \times 2 \times 3 \times 5$

(b) $150 = 2 \times 3 \times 5 \times 5$
So HCF of 120 and 150 is $2 \times 3 \times 5 = 30$
So LCM of 120 and 150 is $\frac{120 \times 150}{30} = 600$

2) (a) (i) $56 = 2 \times 2 \times 2 \times 7$ (ii) $84 = 2 \times 2 \times 3 \times 7$
(b) HCF = $2 \times 2 \times 7 = 28$