



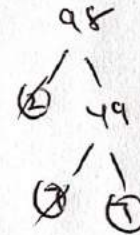
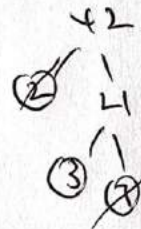
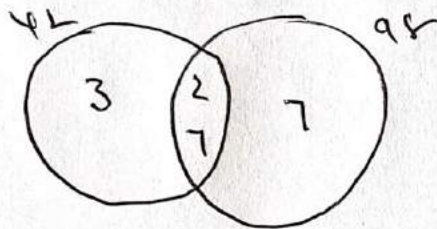
QT LCM and HCF

1. Write 210 as a product of its prime factors

$$210 = 2 \times 3 \times 5 \times 7$$

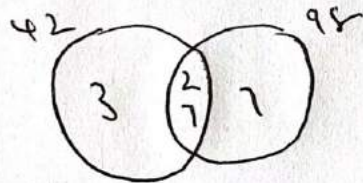


2. Find the highest common factor (HCF) of 42 and 98



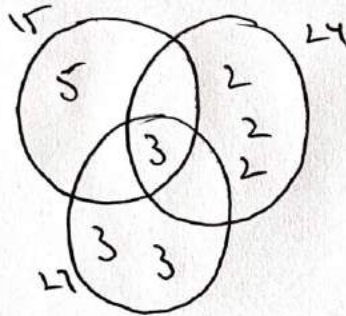
$$\begin{aligned} \text{HCF} &= 2 \times 7 \\ &= 14 \end{aligned}$$

3. Find the lowest common multiple (LCM) of 42 and 98.

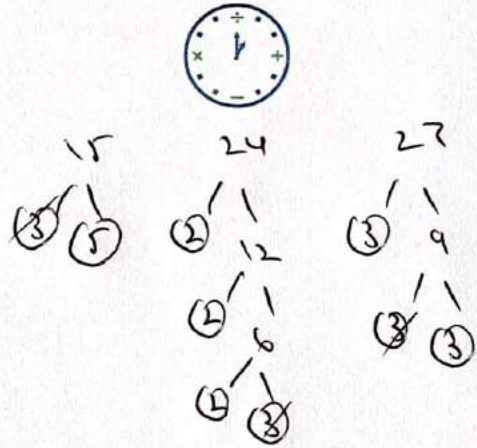


$$\begin{aligned} \text{LCM} &= 2 \times 3 \times 7 \times 7 \\ \text{LCM} &= 294 \end{aligned}$$

4. Find the highest common factor (HCF) of 15, 24 and 27



$$\underline{\underline{\text{HCF} = 3}}$$



5. Find the lowest common multiple (LCM) of 15, 24 and 27

$$\begin{aligned} \text{LCM} &= 2 + 2 + 2 + 3 + 3 + 3 + 5 \\ &= 2^3 \times 3^3 \times 5 \end{aligned}$$

$$\underline{\underline{\text{LCM} = 1080}}$$

6. $3240 = 2^3 \times 3^4 \times 5$

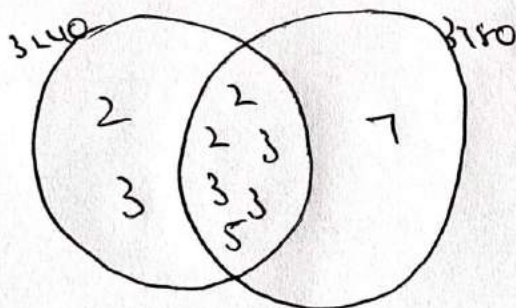
$3780 = 2^2 \times 3^3 \times 5 \times 7$

(i) Find the highest common factor (HCF) of 3240 and 3780

(ii) Find the lowest common multiple (LCM) of 3240 and 3780

$$3240 = 2 + 2 + 2 + 3 + 3 + 3 + 3 + 5$$

$$3780 = 2 + 2 + 3 + 3 + 3 + 5 + 7$$



$$\begin{aligned} \text{HCF} &= 2 + 2 + 3 + 3 + 3 + 5 \\ &= \underline{\underline{540}} \end{aligned}$$

$$\begin{aligned} \text{LCM} &= 540 + 2 + 3 + 7 \\ &= \underline{\underline{22680}} \end{aligned}$$