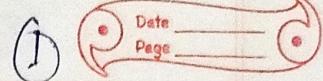


H.W
22.06.2021

Ex- 8B



i) 16 and 35 =

$F_{16} = 1, 2, 4, 8$ and 16

$F_{35} = 1, 5$, and ~~10~~ 35

C.F = 1

H.C.F = 1

ii) 25 and 20 =

$F_{25} = 1, 5, 25$

$F_{20} = 1, 2, 4, 5, 20$

C.F = 1, 5

H.C.F = 5

iii) 27 and 75 =

$F_{27} = 1, 3, 9, 27$

$F_{75} = 1, 3, 5, 75$

C.F = 1, 3

H.C.F = 3

iv) 8, 12 and 18

$F_8 = 1, 2, 4, 8$

$F_{12} = 1, 2, 3, 4, 6, 12$

$F_{18} = 1, 2, 3, 6, 9, 18$

C.F = 1, 2

H.C.F = 2.

v) 96, 36, 45 and 60

$$F_{26} = 1, 2, 26$$

$$F_{36} = 1, 2, 3, 4, 6, 12, 36$$

$$F_{45} = 1, 3, 5, 45$$

$$C.F = 4$$

$$H.C.F = 1$$

(Q3) i) 5 and 8

~~P.F of 5 and 8~~

$$P.F \text{ of } 5 = 1 \times 5 \quad \text{No H.C.F}$$

$$P.F \text{ of } 8 = 1 \times 2$$

ii) 24 and 49

$$P.F \text{ of } 24 = 2 \times 2 \times 3 \times 2$$

$$P.F \text{ of } 49 = 7 \times 7$$

C.W
~~25, 30, 20, 21~~

Division method

Example

Ex - 8B

$$\begin{array}{r} 36 \sqrt{60} \quad | \quad 1 \\ \underline{-36} \\ 24 \end{array}$$

$$\begin{array}{r} 24 \sqrt{36} \quad | \quad 1 \\ \underline{-24} \\ 12 \end{array}$$

$$\begin{array}{r} 12 \sqrt{24} \quad | \quad 2 \\ \underline{-24} \\ 0 \end{array}$$

H.C.F = 12

$$\begin{array}{r} 18 \sqrt{30} \quad | \quad 1 \\ \underline{-18} \\ 12 \end{array}$$

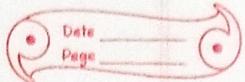
$$\begin{array}{r} 12 \sqrt{18} \quad | \quad 1 \\ \underline{-12} \\ 6 \end{array}$$

$$\begin{array}{r} 6 \sqrt{12} \quad | \quad 2 \\ \underline{-6} \\ 6 \end{array}$$

H.C.F = 6

Ex. 8B

(3)



45, 75 and 135

$$45 \text{ and } 75 = 25 \mid 45$$

$$\begin{array}{r} 45 \sqrt{75} \\ -45 \\ \hline 30 \end{array} \quad \begin{array}{r} 30 \mid 45 \\ -30 \\ \hline 15 \end{array} \quad \begin{array}{r} 15 \mid 30 \\ -30 \\ \hline 0 \end{array}$$

HCF of 45 and 75 is 15

$$\begin{array}{r} 15 \sqrt{135} \\ -135 \\ \hline 0 \end{array}$$

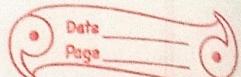
HCF of 45, 75 and 135 is 15.

$$180 = 1, 2, 3, 6, 9, 10$$

Ex-8B

- (5) The greatest no. that divides each of 180, 225 and 315 will be the HCF of 180, 225 and 315
Using division method, the HCF of 180, 225 and 315 are shown below

(4)



$$\underline{180 \quad 225 \quad 1}$$

$$\begin{array}{r} 180 \\ \hline 45 \mid 180 \quad 4 \\ \underline{180} \\ 0 \end{array}$$

$$\underline{45 \quad 315 \quad 7}$$

$$\begin{array}{r} 315 \\ \hline 0 \end{array}$$

HCF of 180, 225 and 315 = 45, required no. is 45.

Ques - Required no. is the HCF of (93-3),

$$(111-3), (129-3)$$

= HCF of 90, 108 and 126.

90 and 108

$$\begin{array}{r} 90 \quad 180 \quad 108 \\ \hline -90 \\ \hline 18 \mid 90 \quad 108 \\ \hline 90 \\ \hline 0 \end{array}$$

HCF of 90 and 108 is 18

18 and 126

$$\begin{array}{r} 18 \quad 136 \quad 72 \\ \hline 126 \\ \hline 0 \end{array}$$

Required no. is 18