

# Revision ex-(8)

1. find the HCF of

(i) 108, 288 and 420

Ans -

$$\begin{array}{r}
 108 \overline{) 288} \quad (2) \\
 \underline{216} \\
 72 \overline{) 108} \quad (1) \\
 \underline{72} \\
 3 \overline{) 72} \quad (2) \\
 \underline{72} \\
 \hline
 \times
 \end{array}$$

$$\begin{array}{r}
 36 \overline{) 420} \quad (11) \\
 \underline{396} \\
 24 \overline{) 36} \quad (1) \\
 \underline{24} \\
 12 \overline{) 24} \quad (2) \\
 \underline{24} \\
 \hline
 \times
 \end{array}$$

HCF = 12

(ii) 36, 54 and 138

Ans -

$$\begin{array}{r}
 36 \overline{) 54} \quad (1) \\
 \underline{36} \\
 18 \overline{) 36} \quad (2) \\
 \underline{36} \\
 \hline
 \times
 \end{array}$$

$$\begin{array}{r}
 18 \overline{) 138} \quad (7) \\
 \underline{126} \\
 12 \overline{) 18} \quad (1) \\
 \underline{12} \\
 6 \overline{) 12} \quad (2) \\
 \underline{12} \\
 \hline
 0
 \end{array}$$

2. using the common factor method find the HCF of :-

(i) 16 and 35

Ans - 16 = 1, 2, 4, 8, 16 ~~2, 16~~  
~~4, 8~~

35 = 1, 5, 7, 35

HCF = 1

(ii) 25 and 20

Ans - 25 = 1, 5, 25

20 = 1, 2, 4, 5, 10, 20

HCF = 5

(iii) 27 and 75

Ans - 27 = 1, 3, 9, 27

75 = 1, 3, 5, 15, 25, 75

HCF = 3

(iv) 8, 12 and 18

Ans - 8 = 1, 2, 4, ~~8, 6, 12~~ HCF = 2

12 = 1, 2, 3, 4, 6, 12

18 = 1, 2, 3, 6, 9, 18