

EXERCISE 8(A)

1. (i) $15 = 1 \times 15$
 3×5

$15 = 1, 3, 5, 15$

(ii) $55 = 1 \times 55$
 11×5

$55 = 1, 5, 11, 55$

(iii) $48 = 1 \times 48$
 2×24
 3×16
 4×12
 6×8

$48 = 1, 2, 3, 4, 8, 6,$
 $12, 16, 24, 48$

(iv) $36 = 1 \times 36$
 2×18
 3×12
 4×9
 6×6

$36 = 1, 2, 3, 4, 6, 9,$
 $12, 18, 36$

(v) $84 = 2 \times 42$
 3×28
 1×84
 4×21
 6×14
 7×12

$84 = 1, 2, 3, 4, 6, 7,$
 $12, 14, 21, 42, 28, 84$

2. (i) less than 25

- 2, 3, 5, 7, 11, 12, 13, 17, 19, 23

(ii) ~~less than~~ between 15 and 35

- 17, 19, 23, 29, 31

(iii) between 8 and 76

- ~~2, 3, 5, 7~~, 11, 12, 13, 17, 19, 23, 29, 31, 37, 41, 43,
47, 53, 59, 61, 67, 71, 73

3. (i) 5 to 45

5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43.

(ii) 2 to 32

2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31

(iii) 8 to 48

11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47

(iv) 9 to 59

11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59

22-6-21
TUESDAY

4. (i) $16 = 2 \overline{) 16}$
 $2 \overline{) 8}$
 $2 \overline{) 4}$
 $2 \overline{) 2}$
 1

$16 = 2 \times 2 \times 2 \times 2$

(ii) $27 = 3 \overline{) 27}$
 $3 \overline{) 9}$
 $3 \overline{) 3}$
 1

$27 = 3 \times 3 \times 3$

(iii) $35 = 5 \times 7$

$$\begin{array}{r|l} 35 & \\ \hline 7 & \end{array}$$
 $35 = 5, 7$
 $35 = 5 \times 7$

(iv) $49 = 7 \times 7$

$$\begin{array}{r|l} 49 & \\ \hline 7 & \end{array}$$
 $49 = 7$
 $49 = 7 \times 7$

5. (i) $P_6 = 2 \times 3$

$$\begin{array}{r|l} 6 & \\ \hline 2 & \\ \hline 3 & \\ \hline 1 & \end{array}$$
 $P_6 = 2, 3$
 $P_6 = 2 \times 3$

(ii) $P_{24} = 2 \times 2 \times 2 \times 3$

$$\begin{array}{r|l} 24 & \\ \hline 2 & \\ \hline 12 & \\ \hline 2 & \\ \hline 6 & \\ \hline 3 & \end{array}$$
 $24 = 2, 3$
 $P_{24} = 2 \times 2 \times 2 \times 3$

(iii) $P_{50} = 2 \times 5 \times 5$

$$\begin{array}{r|l} 50 & \\ \hline 2 & \\ \hline 25 & \\ \hline 5 & \end{array}$$
 $50 = 2, 5$
 $P_{50} = 2 \times 5 \times 5$

(iv) $P_{42} = 2 \times 3 \times 7$

$$\begin{array}{r|l} 42 & \\ \hline 2 & \\ \hline 21 & \\ \hline 3 & \\ \hline 7 & \end{array}$$
 $42 = 2, 3, 7$
 $P_{42} = 2 \times 3 \times 7$

⇒ **HCF:**

Ex: 16, 35

Factors of 16 = $\begin{pmatrix} 1 & 2 & 4 & 8 & 16 \\ 1 & 5 & 7 & 35 \end{pmatrix}$
 Factors of 35 =
 HCF = 1