Hw Ex. 8B

3. (i)

16	24	1
	16	
08	16	2
	16	
	00	

HCF = 08

(ii)

18	30	1
	18	
12	18	1
	12	
06	12	2
	12	
	00	

HCF = 6

(iv)

$$\begin{array}{r|l|l} 70 & 80 & 1 \\ & 70 & \\ \hline 10 & 70 & 7 \\ & 70 & \\ \hline & 00 & \end{array}$$

10

$$\begin{array}{r|l|l} 10 & 120 & 12 \\ & 120 & \\ \hline & 000 & \end{array}$$

$$\begin{array}{r|l|l} 10 & 150 & 15 \\ & 150 & \\ \hline & 000 & \end{array}$$

HCF = 10

(iii)

7	14	2
	14	
	00	

7	24	3
	21	
03	21	7
	21	
	00	

HCF = 03

(v)

32	56	1
	32	
24	32	1
	24	
08	24	3
	24	
	00	

08	46	5
	40	
06	40	6
	36	
04	36	9
	36	
	00	

HCF = 4

4. (i)

45 | 75 | 1
45

30 | 45 | 1
30

15 | 30 | 2
30

00

15 | 135 | 9
135

00

HCF = 15

(ii)

~~48 | 36~~

36 | 48 | 1
36

12 | 36 | 3
36

00

12 | 96 | 8
96

00

45
× 2
90

HCF = 12

(iii)

33 | 66 | 2
66

00

33 | 132 | 4
132

00

HCF = 33

6. ⇒ Yes they are coprime

45 | 56 | 1
45
---
11 | 45 | 4
44
---
01 | 44 | 44
44

00

330 7.

15 | 16 | 1
15
---
01 | 15 | 15
15

00

21 | 28 | 1
21
---
07 | 21 | 3
21

00

16 | 21 | 1
16
---
05 | 16 | 3
15
---
01 | 15 | 15
15

0

The Coprime Pairs are
⇒ 15, 16; 15, 28; 16, 21