CLASS NOTES-ANSWERS

Exercise 3.3

1. Find the HCF of the following numbers by prime factorisation and short division methods.

a. 25, 75	b. 48, 56	c. 15, 25, 40
d. 16, 36, 92	e. 36, 48, 102	f. 72, 60, 96
g. 32, 90, 126	h. 28, 70, 112	i. 38, 133, 57
j. 72, 144, 24	k. 30, 105, 75	l. 25, 225, 100

Answer:

a. HCF of 25, 75 = 25

b. HCF of 48, 56 = 8

c. HCF of 15, 25, 40 = 5

d. HCF of 16, 36, 92 = 4

e. HCF of 36, 48, 102 = 6

f. HCF of 72, 60, 96 = 12

g. HCF of 32, 90, 126 = 2

h. HCF of 28, 70, 112 = 14

i. HCF of 38, 133, 57 = 19

j. HCF of 72, 144, 24 = 24

k. HCF of 30, 105, 75 = 15

l. HCF of 25, 225, 100 = 25

2. Inaya has 18 red beads and 32 yellow beads. She wants to make identical bracelets with the beads such that no bead is left over. What is the

greatest number of bracelets she can make?

Answer:

Number of red beads = 18

Number of blue beads = 32

The greatest number of bracelets she can make = HCF of 18 and 32

= 2 bracelets

3. Find the greatest number that divides 81, 126 and 135 without leaving a remainder.

Answer:

The greatest number that divides 81, 126 and 135 without leaving a remainder = HCF of 81, 126, 135

= 9

4. Find the greatest number that divides 65, 97 and 145 leaving 3 as remainder.

Answer:

65 – 3 = 62

97 – 3 = 94

145 – 3 = 142

The greatest number that divides 65, 97 and 145 leaving 3 as remainder

= HCF of 62, 94, 142

= 2