



Exercise 1A

Questions 4:

(i) On dividing 2520 by 405, we get

Quotient = 6, remainder = 90

$$2520 = (405 \times 6) + 90$$

Dividing 405 by 90, we get Quotient = 4, Remainder = 45

$$405 = 90 \times 4 + 45$$

Dividing 90 by 45 We get Quotient = 2, remainder = 0

$$90 = 45 \times 2$$

H.C.F. of 405 and 2520 is 45

$$\begin{array}{r} 405 \overline{)2520} \quad (6 \\ \underline{2430} \\ 90 \quad 405 \quad (4 \\ \underline{360} \\ 45 \overline{)90} \quad (2 \\ \underline{90} \\ \times \end{array}$$

(ii) Dividing 1188 by 504, we get Quotient = 2, remainder = 180

$$1188 = 504 \times 2 + 180$$

Dividing 504 by 180 Quotient = 2, remainder = 144

$$504 = 180 \times 2 + 144$$

Dividing 180 by 144, we get Quotient = 1, remainder = 36

Dividing 144 by 36

Quotient = 4, remainder = 0

H.C.F. of 1188 and 504 is 36

$$\begin{array}{r}
 504 \overline{)1188} \quad (2 \\
 \underline{1008} \\
 180 \quad 504 \quad (2 \\
 \underline{360} \\
 144 \quad 180 \quad (1 \\
 \underline{144} \\
 36 \overline{)144} \quad (4 \\
 \underline{144} \\
 \times
 \end{array}$$

(iii) Dividing 1575 by 960, we get

Quotient = 1, remainder = 615

$$1575 = 960 \times 1 + 615$$

Dividing 960 by 615, we get Quotient = 1, remainder = 345

$$960 = 615 \times 1 + 345$$

Dividing 615 by 345 Quotient = 1, remainder = 270

$$615 = 345 \times 1 + 270$$

Dividing 345 by 270, we get Quotient = 1, remainder = 75

$$345 = 270 \times 1 + 75$$

Dividing 270 by 75, we get Quotient = 3, remainder = 45

$$270 = 75 \times 3 + 45$$

Dividing 75 by 45, we get Quotient = 1, remainder = 30

$$75 = 45 \times 1 + 30$$

Dividing 45 by 30, we get Remainder = 15, quotient = 1

$$45 = 30 \times 1 + 15$$

Dividing 30 by 15, we get Quotient = 2, remainder = 0

H.C.F. of 1575 and 960 is 15

$$\begin{array}{r}
 960 \overline{)1575} \quad (1 \\
 \underline{960} \\
 615 \quad 960 \quad (1 \\
 \underline{615} \\
 345 \quad 615 \quad (1 \\
 \underline{345} \\
 270 \quad 345 \quad (1 \\
 \underline{270} \\
 75 \quad 270 \quad (3 \\
 \underline{225} \\
 45 \quad 75 \quad (1 \\
 \underline{45} \\
 30 \quad 45 \quad (1 \\
 \underline{30} \\
 15 \quad 30 \quad (2 \\
 \underline{30} \\
 \times
 \end{array}$$

***** END *****