Factors, Multiples and Primes Revision

(a)

Write down a multiple of 7 that is between 20 and 30

$21 \; or \; 28$

(b)

Write down all the factors of 28

$1, 2, 4, 7, 14, 28$

(c)

$1, 2, 9, 14, 28, 52, 91$

From the numbers in the list above, write down:

(a) A prime number 2

(b) A factor of 14 $1, 2 \; or \; 14$

(c) A multiple of 13 $52 \; or \; 91$

(d)

Express 650 as a product of its prime factors

$650 = 2 \times 5^2 \times 13$

(e)

Find the lowest common multiple (LCM) of 16 and 20

80

(f)

Find the highest common factor (HCF) of 24 and 54

6

(g)

Find the HCF and LCM of 60 and 96

$HCF = 12$
$LCM = 480$

(h)

$A = 2^3 \times 3^2 \times 5$
$B = 2^2 \times 5^3 \times 11$
Find the HCF and LCM of A and B

$HCF = 20$
$LCM = 99000$

(i)

Find the lowest common multiple (LCM) of 20, 45 and 120.

360

(j)

The highest common factor of x and 45 is 15. The lowest common multiple of x and 45 is 630. Find the value of x.

$x = 210$