

Harder HCF and LCM Problems

(a) The HCF of a and 40 is 10. The LCM of a and 40 is 280. Find the value of a .

$$(a) a = 70$$

(b) The HCF of b and 24 is 12. The LCM of b and 24 is 120. Find the value of b .

$$(b) b = 60$$

(c) The HCF of c and 54 is 18. The LCM of c and 54 is 378. Find the value of c .

$$(c) c = 126$$

(d) The HCF of d and 44 is 22. The LCM of d and 44 is 660. Find the value of d .

$$(d) d = 330$$

(a) The HCF of two numbers is 8. The LCM of the same two numbers is 440. Find a possible pair of numbers.

$$(a) 88 \text{ and } 40 \\ \text{or } 8 \text{ and } 440$$

(b) The HCF of two numbers is 21. The LCM of the same two numbers is 252. Find two possible pairs of numbers.

$$(b) 63 \text{ and } 84 \\ \text{or } 21 \text{ and } 252$$

(c) The HCF of two numbers is 15. The LCM of the same two numbers is 1650. Find three possible pairs of numbers.

$$(c) 165 \text{ and } 150 \\ \text{or } 330 \text{ and } 75 \\ \text{or } 30 \text{ and } 825 \\ \text{or } 15 \text{ and } 1650$$

(a) The HCF of two numbers is 6. The LCM of the same two numbers is a multiple of 21. Find a possible pair of numbers.

$$(a) \text{ e.g. } 6 \text{ and } 42 \\ 12 \text{ and } 42$$

(b) The HCF of two numbers is 10. The LCM of the same two numbers is a multiple of 35. Find two possible pairs of numbers.

$$(b) \text{ e.g. } 10 \text{ and } 70 \\ 20 \text{ and } 70 \\ 10 \text{ and } 210$$

(a) The HCF of 12, 42 and x is 3. The LCM of 12, 42 and x is 420. Find the value of x .

$$(a) x = 15$$

(b) The HCF of 50, x and y is 5. The LCM of 50, x and y is 1050. Find three possible pairs of values for x and y .

$$(b) \text{ e.g. } x = 30, y = 105 \\ \text{or } x = 70, y = 75 \\ \text{or } x = 15, y = 35$$