## **HCF AND LCM**

[ESTIMATED TIME: 45 minutes]

GCSE (+ IGCSE) EXAM QUESTION PRACTICE

1.	[2 marks]
Find the Lowest Common Multiple (LCM) of 20 and 24	
2.	[4 marks]
(a) Find the Highest Common Factor (HCF) of 54 and 90	,
	(2)
(b) Find the Lowest Common Multiple (LCM) of 54 and 90	
	(2)



3. [2 marks

The highest common factor (HCF) of 140 and x is 20

The lowest common multiple (LCM) of 140 and x is 420

Find the value of x.

*x* = .....

4. [2 marks]

$$S = 2^4 \times 3 \times 7^2$$

$$T = 2 \times 5^3 \times 7^3$$

Find the Highest Common Factor (HCF) of S and T.

$$A = 2^3 \times 3^2 \times 5^4$$

$$B = 3^5 \times 5 \times 7^3$$

Find the Highest Common Factor (HCF) of A and B.

6. [4 marks

(a) Find the Highest Common Factor (HCF) of 75 and 90

(2)

(b) Find the Lowest Common Multiple (LCM) of 75 and 90



7.	[4 marks]

(a) Find the Highest Common Factor of 64 and 80

(2)

(b) Find the Lowest Common Multiple of 64 and 80

(2)

8. [2 marks]

x is an integer.

The Lowest Common Multiple (LCM) of x and 12 is 120

The Highest Common Factor (HCF) of x and 12 is 4

Work out the value of *x*.



 $x = \dots$ 

Given that  $A = 2^3 \times 3$  and  $B = 2^2 \times 3^2$ 

find the Lowest Common Multiple (LCM) of A and B.

.....

10. [4 marks]

$$A = 2^4 \times 3^2 \times 7^3$$

$$B = 2^2 \times 3^5 \times 5^2$$

(a) Find the highest common factor (HCF) of A and B

(2)

(b) Find the lowest common multiple (LCM) of A and B

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3780 =	$^{2}$	X	$3^{3}$	X	5	X	7

$$3240 = 2^3 \times 3^4 \times 5$$

(a) Find the highest common factor (HCF) of 3780 and 3240 Give your answer as a product of prime factors.



(b) Find the lowest common multiple (LCM) of 3780 and 3240 Give your answer as a product of prime factors.



(a) Find the Highest Common Factor of 75 and 105.

(2)

(b) Find the Lowest Common Multiple of 75 and 105.



$$267\ 300 = 2^2 \times 3^5 \times 5^2 \times 11$$

$$246\ 960 = 2^4 \times 3^2 \times 5 \times 7^3$$

(a) Find the highest common factor (HCF) of 267 300 and 246 960 Give your answer as a product of prime factors.

(2)

(b) Find the lowest common multiple (LCM) of 267 300 and 246 960 Give your answer as a product of prime factors.

(2)

14. [4 marks]

(a) Find the Highest Common Factor of 72 and 90

(2)

(b) Find the Lowest Common Multiple of 72 and 90

