

HCF and LCM: the Ladder Method

1
Find the HCF of 24 and 40.

2	24	40
2	12	20
	6	10

$$\text{HCF} = \square \times \square \times \square = \square$$

2
Find the HCF of 30 and 50.

2	30	50
	15	25

$$\text{HCF} = \square \times \square = \square$$

3
Find the HCF of 18 and 24.

	18	24

$$\text{HCF} = \underline{\hspace{2cm}}$$

4
Find the HCF of 42 and 70.

	42	70

$$\text{HCF} = \underline{\hspace{2cm}}$$

5
Fill in the missing numbers.
Then find the HCF of 60 and 84.

2	60	84
	30	
3	15	21

$$\text{HCF} = \underline{\hspace{2cm}}$$

6
Find the HCF of 12 and 48.
What do you notice?

	12	48
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$$\text{HCF} = \underline{\hspace{2cm}}$$

7
Mia has 45 red beads and 60 blue beads.
She makes bracelets that are all the
same and uses every bead. What is the
greatest number of bracelets she
can make?

$$\underline{\hspace{2cm}}$$

8
Here is Sam's ladder for 36 and 54.
Sam says the HCF is 6. What has Sam
done wrong? Find the HCF.

2	36	54
3	18	27
	6	9

$$\text{HCF} = \underline{\hspace{2cm}}$$

HCF and LCM: the Ladder Method *further practice*

9
Find the LCM of 20 and 30.

2	20	30
5	10	15
	2	3

$$\text{LCM} = \square \times \square \times \square = \square$$

10
Find the LCM of 18 and 27.

3	18	27
	6	9

$$\text{LCM} = \square \times \square \times \square = \square$$

11
Find the LCM of 16 and 40.

	16	40

$$\text{LCM} = \underline{\hspace{2cm}}$$

12
Find the LCM of 28 and 42.

	28	42

$$\text{LCM} = \underline{\hspace{2cm}}$$

13
A green light flashes every 8 seconds.
A blue light flashes every 12 seconds.
They flash together now.
How many seconds until they next
flash together?

$$\underline{\hspace{2cm}}$$

14
Stickers come in sheets of 12.
Badges come in boxes of 18.
Priya wants the same number of
stickers as badges. What is the
smallest number of each she can have?
How many sheets and how many boxes
is that?

$$\underline{\hspace{2cm}}$$

15
Here are the side and the bottom of
a ladder. What were the two numbers?
Find their LCM.

2		
3		
	5	7

$$\text{Numbers} = \underline{\hspace{2cm}}$$

$$\text{LCM} = \underline{\hspace{2cm}}$$

16
Ali says the LCM of two numbers is
always the two numbers
multiplied together.
Is Ali right? Explain.

$$\underline{\hspace{2cm}}$$