

Common Multiples and the LCM

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Examples



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Workout

- Question 1: (a) Write down the first ten multiples of 2.
(b) Write down the first ten multiples of 3.
(c) List the first three common multiples of 2 and 3.
- Question 2: (a) Write down the first ten multiples of 4.
(b) Write down the first ten multiples of 5.
(c) List the first three common multiples of 4 and 5.
- Question 3: Write down three common multiples of each of these pairs of numbers.
- (a) 2 and 5 (b) 3 and 4 (c) 4 and 6 (d) 10 and 15
(e) 20 and 30 (f) 3 and 5 (g) 6 and 9 (h) 6 and 12
- Question 4: (a) Write down the first ten multiples of 5.
(b) Write down the first ten multiples of 8.
(c) Find the lowest common multiple (LCM) of 5 and 8.
- Question 5: (a) Write down the first ten multiples of 6.
(b) Write down the first ten multiples of 8.
(c) Find the lowest common multiple (LCM) of 6 and 8.
- Question 6: Find the lowest common multiple (LCM) of each of these pairs of numbers.
- (a) 5 and 6 (b) 2 and 7 (c) 3 and 8 (d) 4 and 10
(e) 9 and 4 (f) 6 and 7 (g) 6 and 8 (h) 9 and 12
(i) 15 and 40 (j) 12 and 20 (k) 13 and 4 (l) 18 and 6
(m) 25 and 35 (n) 22 and 33 (o) 16 and 24 (p) 20 and 28
- Question 7: Find the lowest common multiple (LCM) of each of these sets of numbers.
- (a) 2, 3 and 5 (b) 3, 4 and 5 (c) 2, 5 and 7 (d) 5, 6 and 9
(e) 10, 12 and 15 (f) 2, 3, 4 and 5 (g) 1, 2, 3, 4, 5 and 6.

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Question 1: A toad croaks every 8 seconds.
A frog croaks every 6 seconds.
They both croak at the same time.
After how many seconds will they next both croak at the same time?



Question 2: A bus leaves Antrim Bus Station every 12 minutes.
A train leaves Antrim Train Station every 18 minutes.
At 8am a bus and a train leave the stations at the same time.

- (a) When is the next time that a bus and a train leave at the same time?
(b) Between 8am and 11am, on how many occasions does a bus and a train leave at the same time?



Question 3: The lowest common multiple of two numbers is 60.
Only one of the numbers is a multiple of 4.
Write down two possible numbers.

Question 4: The lowest common multiple of two numbers is 70.
Both numbers are less than 20.
Write down two possible numbers.

Question 5: A red light flashes every 6 seconds.
A green light flashes every 15 seconds.
A blue light flashes every 21 seconds.
They have all flashed at the same time.
After how many seconds will they next all flash at the same time?

Question 6: Explain why Charlie is wrong



To find the LCM of two numbers,
just multiply them together

Question 7: Penny and Kenny have the same number of football cards.
Penny has sorted her cards into piles of 10.
Kenny has sorted his cards into piles of 18.
Penny has less than 100 cards.
How many football cards do they have?

Question 8: Jennifer says that the lowest common multiple of two consecutive numbers is equal to the product of the two numbers.
By trying four different pairs of consecutive numbers, explore her theory.

Answers



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