



CLASS 5 MATHS · 2026-27

Class 5 Factors and Multiples Worksheet

Factors, multiples, common factors and primes

90

QUESTIONS

65

MINUTES

8

EXERCISES

This belongs to _____

Date _____

WHAT YOU'LL GET GOOD AT

- List all the factors of a two-digit number.
- Write the first five multiples of a number.
- Find the common factors of two numbers.
- Identify prime numbers within a small set.

Take your time, and have a go at every one. If you get stuck, look at the orange box — Ollie has already done one for you.

Class 5 Factors and Multiples Worksheet

Factors, multiples, common factors and primes · 90 questions · tick each box as you finish

Exercise 1 of 8 · 12 questions List all the factors of each number.



WRITE THE ANSWER

HERE'S ONE DONE FOR YOU

Factors of 20 -> find every number that divides into 20 exactly, working in pairs from the outside in: 1×20 , 2×10 , 4×5 . There is no whole number between 4 and 5 that works, so the search is complete. Factors of 20: 1, 2, 4, 5, 10, 20.

1) 12	2) 18
3) 24	4) 36
5) 45	6) 50
7) 60	8) 16
9) 27	10) 40
11) 72	12) 84

Exercise 2 of 8 · 12 questions Write the first five multiples of each number.

WRITE THE ANSWER

HERE'S ONE DONE FOR YOU

First five multiples of 14 -> multiply 14 by 1, 2, 3, 4 and 5: $14 \times 1 = 14$, $14 \times 2 = 28$, $14 \times 3 = 42$, $14 \times 4 = 56$, $14 \times 5 = 70$. So the first five multiples are 14, 28, 42, 56, 70.

1) 6

2) 9

3) 11

4) 15

5) 20

6) 25

7) 7

8) 8

9) 12

10) 13

11) 18

12) 30

Exercise 3 of 8 · 12 questions Find the common factors of each pair of numbers.

WRITE THE ANSWER

HERE'S ONE DONE FOR YOU

Common factors of 10 and 15 -> list each number's factors separately: factors of 10 are 1, 2, 5, 10; factors of 15 are 1, 3, 5, 15. The numbers that appear in both lists are 1 and 5, so the common factors of 10 and 15 are 1 and 5.

1) 12 and 18

2) 16 and 24

3) 20 and 30

4) 15 and 25

5) 8 and 12

6) 18 and 27

7) 14 and 21

8) 9 and 27

9) 10 and 15

10) 24 and 36

11) 16 and 20

12) 28 and 42

Exercise 4 of 8 · 12 questions Circle the prime number in each list.

CIRCLE THE ANSWER

HERE'S ONE DONE FOR YOU

9, 10, 12, 13 -> check each number for factors besides 1 and itself. $9 = 3 \times 3$ (composite), $10 = 2 \times 5$ (composite), 12 has many factors (composite), but 13 has no factors except 1 and 13. So 13 is the prime number.

1) 8, 9, 11, 15

2) 12, 13, 14, 16

3) 21, 23, 25, 27

4) 17, 18, 20, 22

5) 29, 30, 32, 33

6) 19, 20, 21, 24

7) 31, 32, 33, 34

8) 41, 42, 44, 46

9) 51, 53, 54, 55

10) 61, 62, 63, 65

11) 71, 72, 74, 75

12) 81, 82, 83, 85

Exercise 5 of 8 · 10 questions List the first three common multiples of each pair of numbers.

WRITE THE ANSWER

HERE'S ONE DONE FOR YOU

First three common multiples of 4 and 5 -> list a few multiples of each: multiples of 4 are 4, 8, 12, 16, 20, 24...; multiples of 5 are 5, 10, 15, 20, 25, 30.... The numbers appearing in both lists, in order, are 20, 40, 60.

1) 2 and 3

2) 4 and 6

3) 3 and 5

4) 6 and 8

5) 4 and 10

6) 5 and 6

7) 3 and 4

8) 9 and 6

9) 7 and 2

10) 8 and 12

Exercise 6 of 8 · 10 questions Find the mistake in each child's thinking, and write the correct answer.

WRITE THE ANSWER

HERE'S ONE DONE FOR YOU

Question: Sana lists the factors of 16 as 1, 2, 4, 16 and says she is done. Is her list complete? -> Checking factor pairs: 1×16 , 2×8 , 4×4 . She missed 8. The complete list of factors of 16 is 1, 2, 4, 8, 16.

1) Kabir lists the factors of 18 as 1, 2, 3, 6, 9. Which factor did he miss, and what is the complete list?

2) Priya says a number can never be a factor of itself. Is this true?

3) Yusuf lists the first five multiples of 7 as 7, 14, 20, 28, 35 - one of them is wrong. Which one, and what should it be?

4) Sana says 1 is a prime number because it has a factor. Is she right?

5) Rehan lists the common factors of 8 and 12 as 1, 2, 3, 4. Check this list - is 3 really a factor of 8?

6) Devika lists the common factors of 9 and 15 as 1, 3, 5. Check whether 5 is really a factor of 9.

7) Arjun says a prime number must always be odd, so 2 cannot be prime. Is he right?

8) Meera lists the factor pairs of 24 as (1, 24), (2, 12), (3, 8), (4, 5). Check the last pair - does 4×5 equal 24?

9) Isha says every multiple of a number is bigger than the number itself. Is this true for the very first multiple?

10) Kabir says 51 is a prime number because it is not divisible by 2 or 5. What did he forget to check, and is 51 actually prime?

Exercise 7 of 8 · 12 questions Solve each word problem.

WRITE THE ANSWER

HERE'S ONE DONE FOR YOU

A caterer packs 30 samosas into equal boxes with none left over. List all the possible numbers of samosas per box. -> This is the same as listing the factors of 30: 1×30 , 2×15 , 3×10 , 5×6 . So the possible box sizes are 1, 2, 3, 5, 6, 10, 15, 30.

1) A teacher has 24 pencils and wants to give an equal number to every student with none left over. List three different ways she could group the students (three factor pairs of 24).

2) A sweet shop arranges 36 laddus into equal rows for a festival display, with none left over. What are all the possible numbers of rows it could use?

3) A cricket match is played every 4 days and a school holiday falls every 6 days. Both happen today. List the next three days (counting from today as day 0) on which a match and a holiday could fall together again.

4) Bus A leaves the depot every 15 minutes and Bus B leaves every 20 minutes. If both leave together now, list the next three times (in minutes from now) that they will leave together again.

5) A gardener plants saplings in equal rows, with no saplings left over, from a total of 45 saplings. List all the possible row sizes.

6) ₹48 is to be split equally among a group of friends with nothing left over. List all the group sizes for which this is possible.

7) A shop restocks sweets every 8 days and biscuits every 12 days. It restocks both today. List the next three days on which it will restock both together again.

8) A number is a common factor of 20 and 30, and it is also a prime number. Which number or numbers fit?

9) A trader has 60 apples and 84 oranges and wants to split them into identical baskets, with the same number of apples and the same number of oranges in every basket. List the common factors of 60 and 84 - these are the possible numbers of baskets.

10) A number is a common multiple of both 5 and 8. List the three smallest such numbers.

11) Meera arranges 40 chairs into equal rows with no chairs left over. List all the possible numbers of chairs per row.

12) A book club meets every 9 days and a chess club meets every 6 days. Both meet today. List the next two days on which both clubs will meet on the same day.

Exercise 8 of 8 · 10 questions Answer each question, explaining your thinking where asked.

WRITE THE ANSWER

HERE'S ONE DONE FOR YOU

Without listing all the factors, how can you tell 84 is a multiple of both 6 and 7? $\rightarrow 84 = 12 \times 7$, so it is automatically a multiple of 7. It is also even and its digits add up to $8 + 4 = 12$, a multiple of 3 - and a number that is a multiple of both 2 and 3 is always a multiple of 6. So 84 is a multiple of both 6 and 7.

1) Without listing all the factors, how can you tell 51 is not prime, just by checking whether its digits add up to a multiple of 3?

2) Explain why every even number greater than 2 must be composite (not prime).

3) How do you know 1 is neither prime nor composite?

4) Without dividing, how can you tell 90 is a multiple of both 9 and 10?

5) A number has exactly two factors. What kind of number must it be?

6) Explain why every multiple of 10 is also a multiple of 5.

7) Find a two-digit number that is even and has exactly 4 factors.

8) Find a number less than 20 that is both a multiple of 3 and a prime number.

9) List two prime numbers between 1 and 20 that are each one more than a multiple of 6 (like 7, since $7 = 6 + 1$).

10) A number is a common multiple of 6 and 8, and it is less than 50. What is the number?

**All done? How did that feel?**

Colour in a star. Three stars means you could teach it to someone else.



Tricky · Getting there · Easy now



Answer key

For grown-ups

Class 5 Factors and Multiples Worksheet · keep this page back until your child has finished.

1. List all the factors of each number.

- 1) 1, 2, 3, 4, 6, 12
- 2) 1, 2, 3, 6, 9, 18
- 3) 1, 2, 3, 4, 6, 8, 12, 24
- 4) 1, 2, 3, 4, 6, 9, 12, 18, 36
- 5) 1, 3, 5, 9, 15, 45
- 6) 1, 2, 5, 10, 25, 50
- 7) 1, 2, 3, 4, 5, 6, 10, 12, 15, 20, 30, 60
- 8) 1, 2, 4, 8, 16
- 9) 1, 3, 9, 27
- 10) 1, 2, 4, 5, 8, 10, 20, 40
- 11) 1, 2, 3, 4, 6, 8, 9, 12, 18, 24, 36, 72
- 12) 1, 2, 3, 4, 6, 7, 12, 14, 21, 28, 42, 84

2. Write the first five multiples of each number.

- 1) 6, 12, 18, 24, 30
- 2) 9, 18, 27, 36, 45
- 3) 11, 22, 33, 44, 55
- 4) 15, 30, 45, 60, 75
- 5) 20, 40, 60, 80, 100
- 6) 25, 50, 75, 100, 125
- 7) 7, 14, 21, 28, 35
- 8) 8, 16, 24, 32, 40
- 9) 12, 24, 36, 48, 60
- 10) 13, 26, 39, 52, 65
- 11) 18, 36, 54, 72, 90
- 12) 30, 60, 90, 120, 150

3. Find the common factors of each pair of numbers.

- 1) 1, 2, 3, 6
- 2) 1, 2, 4, 8
- 3) 1, 2, 5, 10
- 4) 1, 5
- 5) 1, 2, 4
- 6) 1, 3, 9
- 7) 1, 7
- 8) 1, 3, 9
- 9) 1, 5
- 10) 1, 2, 3, 4, 6, 12
- 11) 1, 2, 4
- 12) 1, 2, 7, 14

4. Circle the prime number in each list.

- 1) 11
- 2) 13
- 3) 23
- 4) 17
- 5) 29
- 6) 19
- 7) 31
- 8) 41
- 9) 53
- 10) 61
- 11) 71
- 12) 83

5. List the first three common multiples of each pair of numbers.

- 1) 6, 12, 18
- 2) 12, 24, 36
- 3) 15, 30, 45
- 4) 24, 48, 72
- 5) 20, 40, 60
- 6) 30, 60, 90
- 7) 12, 24, 36
- 8) 18, 36, 54
- 9) 14, 28, 42
- 10) 24, 48, 72

6. Find the mistake in each child's thinking, and write the correct answer.

- 1) He missed 18 itself. The complete list of factors of 18 is 1, 2, 3, 6, 9, 18.
- 2) No. Every number is a factor of itself - for example, 7 is a factor of 7, since $7 \div 7 = 1$ exactly.
- 3) The third multiple, 20, is wrong. $7 \times 3 = 21$, not 20, so the correct list is 7, 14, 21, 28, 35.
- 4) No. A prime number must have exactly two factors - 1 and itself. The number 1 has only one factor (itself), so it is neither prime nor composite.
- 5) No, 3 is not a factor of 8 ($8 \div 3$ does not divide exactly). The correct common factors of 8 and 12 are 1, 2, 4.
- 6) No, 5 is not a factor of 9 (the factors of 9 are 1, 3, 9). The correct common factors of 9 and 15 are 1, 3.
- 7) No. 2 is a prime number and it is even - being prime only requires exactly two factors, not being odd.
- 8) No, $4 \times 5 = 20$, not 24. The correct fourth pair is (4, 6), since $4 \times 6 = 24$.
- 9) The very first multiple of a number is the number itself (1 times the number), so it is equal to it, not bigger. Every multiple after that is bigger.
- 10) He forgot to check divisibility by 3. $51 \div 3 = 17$ exactly, so 51 is not prime - it is composite, with factors 1, 3, 17, 51.

7. Solve each word problem.

- 1) Any three factor pairs of 24, such as 1×24 , 2×12 , and 3×8 (the factors of 24 are 1, 2, 3, 4, 6, 8, 12, 24).
- 2) 1, 2, 3, 4, 6, 9, 12, 18, 36 rows.
- 3) 12, 24, 36.
- 4) 60, 120, 180 minutes.
- 5) 1, 3, 5, 9, 15, 45.
- 6) 1, 2, 3, 4, 6, 8, 12, 16, 24, 48 friends.
- 7) 24, 48, 72.
- 8) 2 and 5.
- 9) 1, 2, 3, 4, 6, 12.
- 10) 40, 80, 120.
- 11) 1, 2, 4, 5, 8, 10, 20, 40.
- 12) 18, 36.

8. Answer each question, explaining your thinking where asked.

- 1) 51's digits add up to $5 + 1 = 6$, and 6 is a multiple of 3, so 51 is divisible by 3 ($51 \div 3 = 17$) - meaning it has a factor besides 1 and itself, so it is not prime.
- 2) Any even number is divisible by 2. If the number is also greater than 2, then 1, 2 and the number itself are three different factors, so it has more than the two factors a prime number is allowed - making it composite.
- 3) A prime number has exactly two factors, and a composite number has more than two factors. The number 1 has only one factor (itself), so it does not fit either definition.
- 4) $90 = 9 \times 10$, so it is automatically a multiple of both 9 and 10. Also, its digits add up to 9 (a multiple of 9), and it ends in 0 (a multiple of 10).
- 5) It must be a prime number - that is the definition of a prime number.
- 6) Because 10 itself is a multiple of 5 ($10 = 5 \times 2$), any multiple of 10 is also 5 multiplied by an even number, so it is always a multiple of 5 too.
- 7) 10 (factors 1, 2, 5, 10) - other two-digit even numbers with exactly 4 factors, such as 14 or 22, also work.
- 8) 3 (its factors are only 1 and 3, and it is a multiple of itself, 3×1).
- 9) 7 and 13 (19 also works, since $19 = 18 + 1$).
- 10) 24 (48 also works, since both are common multiples of 6 and 8 that are less than 50).

WHILE YOUR CHILD WORKS

- Listing factors in pairs (1 and 12, 2 and 6, 3 and 4) is faster and less error-prone than listing them in a single row.
- This worksheet does not ask for HCF or LCM by name - if your child has learned those terms elsewhere, that is fine, but they are not required here.
- The prime-number exercise is usually the hardest on this sheet; a quick recap of the tables tends to help more than a rule about primes.

**Spotted a gap while marking?**

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