

Worksheet: Common Factors of a Set of Whole Numbers



Q1: Which number is a factor of 12 and a factor of 33?

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|----|----|----|
| 3 | 11 | 6 |
| 12 | 4 | 33 |



Question Video

- A 3
- B 12
- C 6
- D 33
- E 4

Q2: We know that $4 \times 5 = 20$. Pick the true statement.

- A 20 is a factor of 4.
- B 5 is a multiple of 20.
- C 20 is a multiple of 5.
- D 4 is a multiple of 20.
- E 20 is a factor of 5.



Question Video

Q3: Which of the following numbers is not a common factor of 60 and 90?

- A 15
- B 3
- C 10
- D 2
- E 13

Q4: Which of the following numbers is not a common factor of 36 and 90?

- A 3
- B 6
- C 2
- D 9
- E 5

Q5: Which of the following numbers is not a common factor of 84 and 96?

- A 6
- B 4
- C 3
- D 2
- E 7

Q6: Find all the factors of the numbers 15 and 87.

A 1, 3, 5, 15, 29, 87

B 1, 3

C 1, 3, 5

D 1, 3, 29



Question Video

Q7: Determine the common factors of the following set of numbers: 28, 72, 84.

A 1, 2, 3, 4, 6, 12

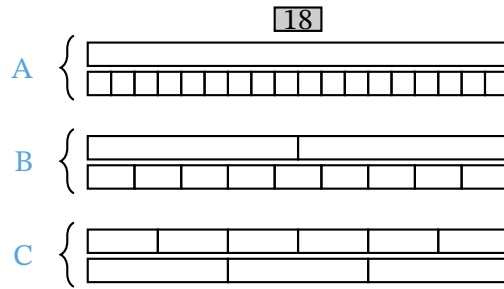
B 1, 2, 4, 7, 14, 28

C 1, 2, 4

D 2, 4

Q8: The diagram shows the three pairs of factors of the number 18. The first pair, 1 and 18, is represented in A, showing 18 as 1×18 or 18×1 .

► What pairs of factors do B and C represent?



A B:3 and 6, C:3 and 18

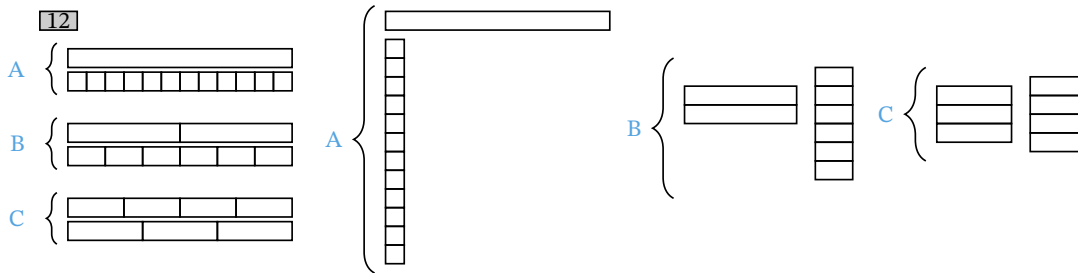
B B: 2 and 18, C: 3 and 18

C B:3 and 9, C:2 and 6

D B: 2 and 9, C: 3 and 6

E B: 2 and 9, C:3 and 9

- The diagrams show the pairs of factors of 12 as in the previous question (left) and also using the area model of multiplication (right). What pairs of factors of 12 do diagrams A, B, and C represent?



- A A: 2 and 10, B: 2 and 6, C: 6 and 6
- B A: 1 and 12, B: 2 and 3, C: 6 and 4
- C A: 2 and 10, B: 2 and 3, C: 3 and 4
- D A: 1 and 12, B: 2 and 6, C: 3 and 4
- E A: 2 and 6, B: 4 and 4, C :3 and 3

- What are all the common factors of 12 and 18?

- A 1, 2, and 3
- B 2, 3, and 6
- C 1, 2, 3, and 4
- D 1, 2, 3, and 6
- E 1, 2, 3, 4 and 5

► What is the greatest common factor of 12 and 18?

A 3

B 5

C 2

D 6

E 4

► A gardener wants to plant 18 orange and 12 blue flowers in rows with the same numbers of orange and blue flowers in each row. She thinks there are four possibilities to do so. Is she right?

A Yes

B No

► How many rows would she get in each of the four possibilities?

A 1, 3, 4, or 5

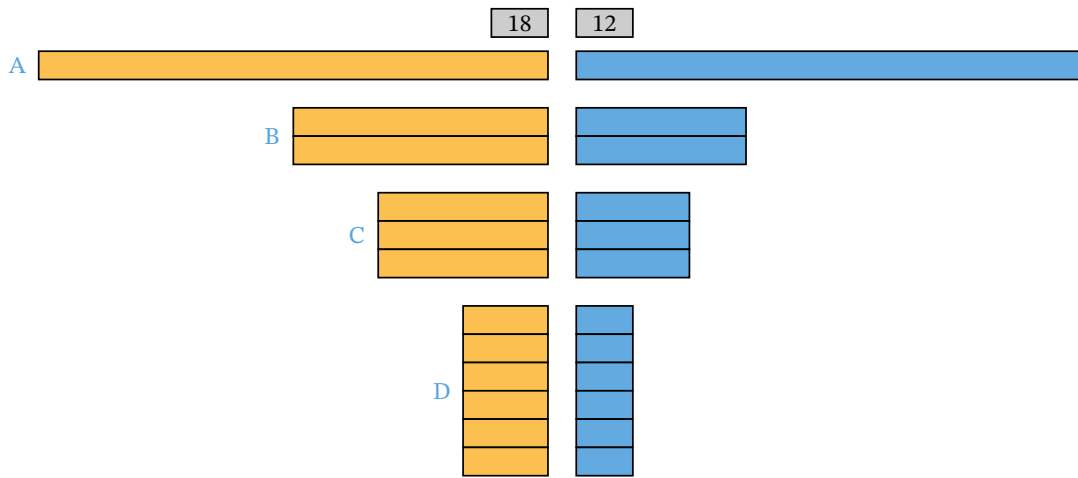
B 1, 2, 3, or 4

C 2, 3, 4, or 5

D 1, 2, 3, or 6

E 2, 3, 4, or 6

► The diagram represents the four possibilities using the four common factors of 18 and 12. Which common factor leads to largest number of rows?



- A 1
- B 3
- C 12
- D 6
- E 2