

Mathematics

Number Sequences

Practice Questions

Find the next two numbers in each of the following sequences...

a) 57, 59, 52, 54, 47, 49, _____, _____

b) 3, 6, 18, 72, _____, _____

c) 216, 125, 64, _____, _____

d) 13, 17, 19, 23, 29, _____, _____

e) 22, 28, 30, 36, 38, _____, _____

f) 13, 18, 23, 23, 33, 28, _____, _____

g) 3, 6, 9, 18, 21, 42, 45, _____, _____

h) 180, 90, 100, 50, 60, _____, _____

i) 80, 86, 76, 82, 72, _____, _____

j) 2, 12, 6, 36, 18, _____, _____

k) 11, 18, 27, 34, 43, _____, _____

l) 150, 144, 140, 134, 130, _____, _____

m) 4, 8, 9, 18, 19, _____, _____

n) 9, 16, 25, 36, _____, _____

o) 33, 50, 37, 54, 41, _____, _____

What do I do?



You need to find the pattern in the number sequence and write down the next two numbers in that sequence.

Top Tips!



Research the following popular number sequences as part of your revision:

- Prime numbers
- Square numbers
- Cube numbers
- Triangular numbers
- You could even research the Fibonacci sequence

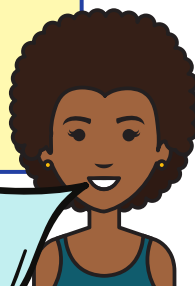
What skills do I need to improve?



Doing lots of practice questions will help with becoming familiar with question types but what else can you do to improve in this area?

- Look for patterns that involve more than one step - this could be $\times 7$, $+2$ for example.
- Take care of patterns that 'jump over' two numbers (more details in the answers).
- Have a go at writing a few sequences for a friend or parent!

Can you create your own number sequence and ask a grown up to help you share it with us? @tutortastic on Instagram and Facebook.



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Answers

a) 57, 59, 52, 54, 47, 49, **42, 44** (+2, -7)

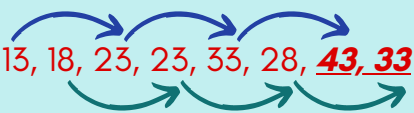
b) 3, 6, 18, 72, **360, 2160** ($\times 2, \times 3, \times 4 \dots$)

c) 216, 125, 64, **27, 8** (Descending cube numbers)

d) 13, 17, 19, 23, 29, **31, 37** (Ascending prime numbers)

e) 22, 28, 30, 36, 38, **44, 46** (+6, +2)

f) 13, 18, **23, 23, 33, 28, 43, 33** (Jump over - +10, +5)



g) 3, 6, 9, 18, 21, 42, 45, **90, 93** ($\times 2, +3$)

h) 180, 90, 100, 50, 60, **30, 40** ($\div 2, +10$)

i) 80, 86, 76, 82, 72, **78, 68** (+6, -10)

j) 2, 12, 6, 36, 18, **108, 54** ($\times 6, \div 2$)

k) 11, 18, 27, 34, 43, **50, 59** (+7, +9)

l) 150, 144, 140, 134, 130, **124, 120** (-6, -4)

m) 4, 8, 9, 18, 19, **38, 39** ($\times 2, +1$)

n) 9, 16, 25, 36, **49, 64** (Ascending square numbers)

o) 33, 50, 37, 54, 41, **58, 45** (+17, -13)

