#2

Ubiquitous Computing Fundamentals Course 2018
Epsilon Project Group

Performance Test

31.10.2018

A case study: How air quality affects student performance? Using an Arduino and commercial sensors in a classroom to measure air quality.

This survey will study the effects of air quality on student performance. Results will be anonymous and will only be used in this courses project mentioned above. This paper includes 2 test sheets, which will be filled. In tests we ask you to solve numerical problems which are based to a book: 501 challenging logical reasoning questions. Follow the instructions given before the class.

I agree to participate in this test. ☑

Age

20 or younger	☐
21-29	☒
30-39	☐
40-49	☐
50-59	☐
60 or older	☐

Gender

Male	☒
Female	☐
Other	☐

Education

High school	☐
Bachelor Degree	☒
Master´s Degree	☐
Doctorate	☐

Did you have coffee today? ☐

Set 1

To answer these questions, you must determine the pattern of the numbers in each series before you will be able to choose which number comes next. These questions involve only simple arithmetic. Although most number series items progress by adding or subtracting, some questions involve simple multiplication or division.

1. Look at this series: 2, 4, 6, 8, 10, . . .
What number should come next?

a. 11
b. 12
c. 13
d. 14

2. Look at this series: 58, 52, 46, 40, 34, . . .
What number should come next?

a. 26
b. 28
c. 30
d. 32

3. Look at this series: 40, 40, 47, 47, 54, . . .
What number should come next?

a. 40
b. 44
c. 54
d. 61

4. Look at this series: 544, 509, 474, 439, . . .
What number should come next?

a. 404
b. 414
c. 420
d. 445

5. Look at this series: 201, 202, 204, 207, . . .
What number should come next?

a. 205
b. 208
c. 210
d. 211

6. Look at this series: 8, 22, 8, 28, 8, . . .
What number should come next?

a. 9
b. 29
c. 32
d. 34

7. Look at this series: 80, 10, 70, 15, 60, . . .
What number should come next?

a. 20
b. 25
c. 30
d. 50

8. Look at this series: 36, 34, 30, 28, 24, . . .
What number should come next?

a. 20
b. 22
c. 23
d. 26

9. Look at this series: 22, 21, 23, 22, 24, 23, . .
What number should come next?

a. 22
b. 24
c. 25
d. 26

Set 2

To answer these questions, you must determine the pattern of the numbers in each series before you will be able to choose which number comes next. These questions involve only simple arithmetic. Although most number series items progress by adding or subtracting, some questions involve simple multiplication or division.

10. Look at this series: 3, 4, 7, 8, 11, 12, . . .
What number should come next?

a. 7
b. 10
c. 14
d. 15

11. Look at this series: 31, 29, 24, 22, 17, . . .
What number should come next?

a. 15
b. 14
c. 13
d. 12

12. Look at this series: 21, 9, 21, 11, 21, 13, . .
What number should come next?

a. 14
b. 15
c. 21
d. 23

13. Look at this series: 53, 53, 40, 40, 27, 27, .
What number should come next?

a. 12
b. 14
c. 27
d. 53

14. Look at this series: 2, 6, 18, 54, . . .
What number should come next?

a. 108
b. 148
c. 162
d. 216

15. Look at this series: 1,000, 200, 40, . . .
What number should come next?

a. 8
b. 10
c. 15
d. 20

16. Look at this series: 7, 10, 8, 11, 9, 12, . . .
What number should come next?

a. 7
b. 10
c. 12
d. 13

17. Look at this series: 14, 28, 20, 40, 32, 64, .
What number should come next?

a. 52
b. 56
c. 96
d. 128

18. Look at this series: 1.5, 2.3, 3.1, 3.9, . . .
What number should come next?

a. 4.2
b. 4.4
c. 4.7
d. 5.1