

(*ЗАДАНИЕ*)
 (* Разложить в ряд Фурье НЕПРЕРЫВНУЮ 2 L периодическую функцию $f[x]=f[x+2 L]$ *)
 (* $f(x)=0, -L \leq x \leq x_1$ *)
 (* $f(x)=0, x_4 \leq x \leq L$ *)
 (* $f(x)=h, x_2 \leq x \leq x_1$ *)
 (* $f(x)$ ЛИНЕЙНАЯ при $x_1 \leq x \leq x_2$ и при $x_3 \leq x \leq x_4$ *)
 (* Вычислить коэффициенты Фурье $A_k, B_k, k \leq 5$ *)
 (* проверить равенство Parseval *)
 (* нарисовать график функции и частичной суммы (вместе) *)

{var, 1}

var.1) $x_1=5, x_2=9, x_3=11, x_4=15, L=19, h=3$

{var, 2}

var.2) $x_1=5, x_2=9, x_3=13, x_4=16, L=21, h=2$

{var, 3}

var.3) $x_1=5, x_2=8, x_3=12, x_4=17, L=20, h=2$

{var, 4}

var.4) $x_1=5, x_2=7, x_3=9, x_4=14, L=17, h=3$

{var, 5}

var.5) $x_1=5, x_2=10, x_3=15, x_4=20, L=23, h=3$

{var, 6}

var.6) $x_1=3, x_2=8, x_3=13, x_4=18, L=20, h=4$

{var, 7}

var.7) $x_1=4, x_2=9, x_3=14, x_4=17, L=19, h=3$

{var, 8}

var.8) $x_1=3, x_2=8, x_3=13, x_4=17, L=19, h=3$

{var, 9}

var.9) $x_1=5, x_2=7, x_3=9, x_4=12, L=14, h=4$

{var, 10}

var.10) $x_1=5, x_2=9, x_3=11, x_4=13, L=17, h=3$

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{var, 11}
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var.11) x1=3, x2=5, x2=9, x4=12, L=16,h=5
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{var, 12}
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var.12) x1=2, x2=6, x2=11, x4=15, L=20,h=4
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{var, 13}
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```
var.13) x1=5, x2=7, x2=11, x4=13, L=16,h=3
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{var, 14}
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```
var.14) x1=3, x2=5, x2=8, x4=10, L=12,h=5
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{var, 15}
```

```
var.15) x1=2, x2=7, x2=11, x4=14, L=16,h=3
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{var, 16}
```

```
var.16) x1=2, x2=7, x2=11, x4=16, L=20,h=5
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{var, 17}
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```
var.17) x1=2, x2=6, x2=8, x4=10, L=14,h=3
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```
{var, 18}
```

```
var.18) x1=3, x2=5, x2=9, x4=11, L=13,h=3
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```
{var, 19}
```

```
var.19) x1=3, x2=8, x2=11, x4=15, L=18,h=2
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```
{var, 20}
```

```
var.20) x1=3, x2=6, x2=8, x4=11, L=15,h=2
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```
{var, 21}
```

```
var.21) x1=2, x2=6, x2=11, x4=14, L=18,h=3
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```
{var, 22}
```

```
var.22) x1=4, x2=8, x2=13, x4=17, L=22,h=3
```

```
{var, 23}
```

```
var.23) x1=4, x2=8, x2=10, x4=13, L=17,h=4
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{var, 24}
```

```
var.24) x1=5, x2=8, x2=11, x4=16, L=20,h=2
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{var, 25}
```

```
var.25) x1=5, x2=8, x2=12, x4=15, L=19,h=4
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{var, 26}
```

```
var.26) x1=4, x2=9, x2=14, x4=16, L=21,h=3
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```
{var, 27}
```

```
var.27) x1=2, x2=5, x2=8, x4=10, L=13,h=3
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{var, 28}
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```
var.28) x1=3, x2=6, x2=10, x4=14, L=18,h=5
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{var, 29}
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```
var.29) x1=4, x2=6, x2=11, x4=16, L=19,h=4
```

```
{var, 30}
```

```
var.30) x1=4, x2=9, x2=14, x4=18, L=22,h=3
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