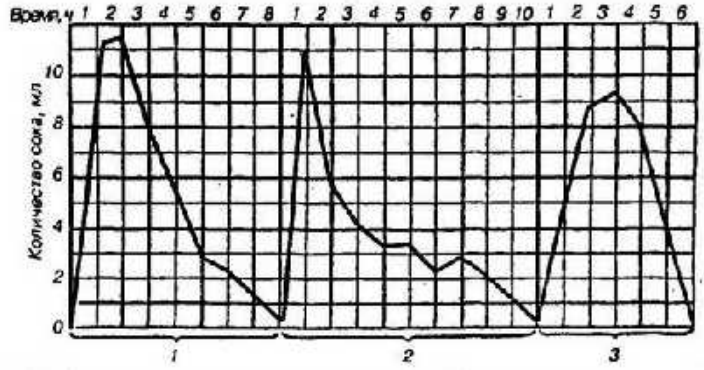




2017 .  
9

1.

( )



1.

:

|  |     |          |     |          |     |
|--|-----|----------|-----|----------|-----|
|  |     |          |     |          |     |
|  | 2 1 | 1        | ( ) | 10       | ( ) |
|  | 1 1 | 2        | ( ) | 8        | 1   |
|  | 3 1 | 3<br>0,5 | 1   | 6<br>0,5 | 1   |
|  |     |          | 1   |          |     |

10

2.

1000

0,34%

6,4

1.

(  $10^{-15}$  ),

46%

2. , ?  
 3. ?  
 4.  $2\%$  ?  
 (  $-S = 4 R^2$ ,  $V = 4/3 R^3$  )

1.  $V = 4/3 R^3, R=3.2 \cdot 10^{-6}$  (1 )  
 $V = 4/3 \cdot 3.14 \cdot (3.2 \cdot 10^{-6})^3 \sim 137.2 \cdot 10^{-18}$  (2 )  
 $V = 137.2 \cdot 10^{-18} / 1.46 = 93.96 \cdot 10^{-18} \cdot 3 \sim 94$  (2 )  
 $V = 94 \cdot 10^{-18} \cdot 1000 = 94 \cdot 10^{-15}$  (1 ) = 94000 (1 )

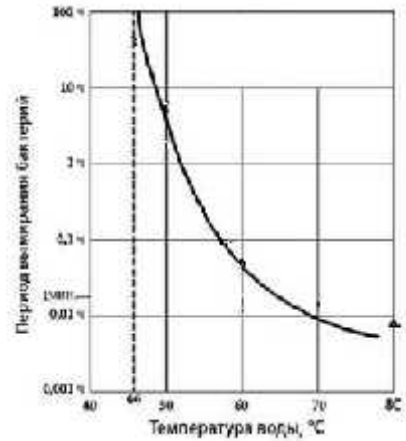
2. \_\_\_\_\_ (1 )  
 3. \_\_\_\_\_ (1 )  
 4. \_\_\_\_\_, ... (1 )

10

3. « \_\_\_\_\_ 90% \_\_\_\_\_ ».

(Legionella spp)

1. \_\_\_\_\_, 0,001%  
 \_\_\_\_\_, 3 \_\_\_\_\_,  
 ( \_\_\_\_\_ ).



1.  $\frac{10\%}{5} = 2\%$  (1 )  
 $\frac{0,001\%}{(180)/5} = 0,001\%$  (2 )

70 (2 )

5

4.

|  |        |        |        |        |        |
|--|--------|--------|--------|--------|--------|
|  | (3-4 ) | (3-4 ) | (2-3 ) | (3-4 ) | (2-3 ) |
|  | ,      |        |        |        | -      |
|  | ,      | (1 )   | (1 )   | (1 )   |        |
|  | (1 )   |        |        |        | (1 )   |

|  |        |        |        |        |        |
|--|--------|--------|--------|--------|--------|
|  | (3-4 ) | (3-4 ) | (2-3 ) | (3-4 ) | (2-3 ) |
|  | ,      | -      |        |        | -      |

|  |      |      |      |      |      |
|--|------|------|------|------|------|
|  | (1 ) | ( )  | (1 ) | (1 ) | (1 ) |
|  |      | (1 ) |      |      |      |

10

1-35

1-20

1. - : = :?
  - 1) \_\_\_\_\_
  - 2) \_\_\_\_\_
  - 3) \_\_\_\_\_
  - 4) \_\_\_\_\_
2. : = :?
  - 1) \_\_\_\_\_
  - 2) \_\_\_\_\_
  - 3) \_\_\_\_\_
  - 4) \_\_\_\_\_
3. : = :?
  - 1) \_\_\_\_\_
  - 2) \_\_\_\_\_
  - 3) \_\_\_\_\_
  - 4) \_\_\_\_\_
4. : = :?
  - 1) \_\_\_\_\_
  - 2) \_\_\_\_\_
  - 3) \_\_\_\_\_
  - 4) \_\_\_\_\_
5. : = :?
  - 1) \_\_\_\_\_
  - 2) \_\_\_\_\_
  - 3) \_\_\_\_\_
  - 4) \_\_\_\_\_
6. : - = - :?
  - 1) \_\_\_\_\_
  - 2) \_\_\_\_\_
  - 3) \_\_\_\_\_
  - 4) \_\_\_\_\_
7. : = :?
  - 1) \_\_\_\_\_
  - 2) \_\_\_\_\_
  - 3) \_\_\_\_\_
  - 4) \_\_\_\_\_
8. : = :?
  - 1) \_\_\_\_\_
  - 2) \_\_\_\_\_
  - 3) \_\_\_\_\_
  - 4) \_\_\_\_\_
9. : = :?
  - 1) \_\_\_\_\_
  - 2) \_\_\_\_\_
  - 3) \_\_\_\_\_
  - 4) \_\_\_\_\_
10. : = :?
  - 1) \_\_\_\_\_
  - 2) \_\_\_\_\_
  - 3) \_\_\_\_\_
  - 4) \_\_\_\_\_
11. : = :?
  - 1) \_\_\_\_\_
  - 2) \_\_\_\_\_
  - 3) \_\_\_\_\_
  - 4) \_\_\_\_\_
12. : = :?
  - 1) \_\_\_\_\_
  - 2) \_\_\_\_\_
  - 3) \_\_\_\_\_
  - 4) \_\_\_\_\_
- 13.\*  $(5) (5) 5 1 :$  =  $(5) 1+1+1+(2) (9)+1 1 : ?$ 
  - 1) \_\_\_\_\_
  - 2) \_\_\_\_\_
  - 3) \_\_\_\_\_
  - 4) \_\_\_\_\_
14. : = :?
  - 1) \_\_\_\_\_
  - 2) \_\_\_\_\_
  - 3) \_\_\_\_\_
  - 4) \_\_\_\_\_
15. : = :?
  - 1) \_\_\_\_\_
  - 2) \_\_\_\_\_
  - 3) \_\_\_\_\_
  - 4) \_\_\_\_\_
16. : = :?
  - 1) \_\_\_\_\_
  - 2) \_\_\_\_\_
  - 3) \_\_\_\_\_
  - 4) \_\_\_\_\_
17. : = :?
  - 1) \_\_\_\_\_
  - 2) \_\_\_\_\_
  - 3) \_\_\_\_\_
  - 4) \_\_\_\_\_
18. : = :?
  - 1) \_\_\_\_\_
  - 2) \_\_\_\_\_
  - 3) \_\_\_\_\_
  - 4) \_\_\_\_\_
19. : = :?
  - 1) \_\_\_\_\_
  - 2) \_\_\_\_\_
  - 3) \_\_\_\_\_
  - 4) \_\_\_\_\_
20. : = :?
  - 1) \_\_\_\_\_
  - 2) \_\_\_\_\_
  - 3) \_\_\_\_\_
  - 4) \_\_\_\_\_

21-30

|     |            |   |
|-----|------------|---|
| 21. |            |   |
|     | 1.« », « » | . |
|     | 2. , , ,   | . |

|          |          |          |                 |   |   |   |
|----------|----------|----------|-----------------|---|---|---|
| 3.       | ,        | ,        | ,               | , | , | . |
| 1) 1 2 3 | 2) 1 2 3 | 3) 1 2 3 | 4) <u>1 2 3</u> |   |   |   |

|        |        |               |
|--------|--------|---------------|
| 22.    |        |               |
| 1.     | .      | , 3           |
| 2.     | .      | , 4 5         |
|        | .      |               |
|        | .      |               |
|        | .      |               |
| 1) 1 2 | 2) 1 2 | 3) 1 2        |
|        |        | 4) <u>1 2</u> |

|          |          |                 |
|----------|----------|-----------------|
| 23.      |          |                 |
| 1.       | .        |                 |
| 2.       | .        |                 |
| 3.       | .        |                 |
|          | .        |                 |
| 1) 1 2 3 | 2) 1 2 3 | 3) 1 2 3        |
|          |          | 4) <u>1 2 3</u> |

|          |          |                 |
|----------|----------|-----------------|
| 24.      |          |                 |
| 1.       | .        | -               |
| 2.       | .        | -               |
| 3.       | .4       | .               |
| 1) 1 2 3 | 2) 1 2 3 | 3) 1 2 3        |
|          |          | 4) <u>1 2 3</u> |

|                 |          |          |
|-----------------|----------|----------|
| 25.             |          |          |
| 1.              | .        |          |
| 2.              | .        |          |
| 3.              | .        | -        |
|                 | .        |          |
| 1) <u>1 2 3</u> | 2) 1 2 3 | 3) 1 2 3 |
|                 |          | 4) 1 2 3 |

|          |          |                 |
|----------|----------|-----------------|
| 26.      |          |                 |
| 1.       | .        | .               |
| 2.       | .        | .               |
| 3.       | .        | .               |
| 1) 1 2 3 | 2) 1 2 3 | 3) 1 2 3        |
|          |          | 4) <u>1 2 3</u> |

|          |                 |          |
|----------|-----------------|----------|
| 27.      |                 |          |
| 1.       | .               | .        |
| 2.       | .               | .        |
| 3.       | .               | .        |
| 1) 1 2 3 | 2) <u>1 2 3</u> | 3) 1 2 3 |
|          |                 | 4) 1 2 3 |

|          |                 |          |
|----------|-----------------|----------|
| 28.      |                 |          |
| 1.       | .               | .        |
| 2.       | .               | .        |
| 3.       | .               | .        |
| 1) 1 2 3 | 2) <u>1 2 3</u> | 3) 1 2 3 |
|          |                 | 4) 1 2 3 |

|          |          |                 |
|----------|----------|-----------------|
| 29.      |          |                 |
| 1.       | .        | .               |
| 2.       | .        | .               |
| 3.       | .        | .               |
| 1) 1 2 3 | 2) 1 2 3 | 3) <u>1 2 3</u> |
|          |          | 4) 1 2 3        |

|     |   |     |
|-----|---|-----|
| 30. |   | ( ) |
| 1.  | . | .   |

