

**2015/2016**

( )

7

10

1.

( ) « » 60 .  
 60 .  $8\frac{1}{3}$  .  
 ?

1

$$1 = 60 \cdot 8\frac{1}{3} / = 500 = 0,5 \quad 60$$

$$0,5 / = 30$$

: 30

1:

|   |                               |   |
|---|-------------------------------|---|
| 1 | $1 = 60$                      | 2 |
| 2 | $1 = 60 \cdot 8\frac{1}{3} /$ | 3 |
| 3 | $1 = 500 = 0,5$               | 2 |
| 4 | $60 \cdot 0,5 / = 30$         | 3 |

10

2

5 / , 5 , 7,5 / .  
 ?

2

$$S = v \cdot t. \quad t=5 \text{ c}$$

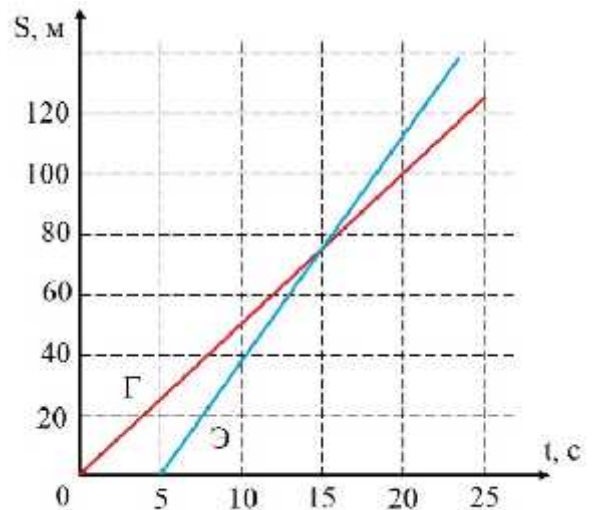
$$S_1 = 5 \cdot 5 = 25$$

$$S = S_1 + v \cdot t \quad S = v \cdot t$$

$$S_0 = 0.$$

$$S_1 + v \cdot t = v \cdot t,$$

$$t = \frac{S_{1\Gamma}}{(v_{\Theta} - v_{\Gamma})} = \frac{v_{\Gamma} t_1}{(v_{\Theta} - v_{\Gamma})} = \frac{5 \cdot 5}{7,5 - 5} = 10 \text{ c.}$$



|    |     |       |
|----|-----|-------|
|    | ,   | ,     |
| 0  | 0   | 0     |
| 1  | 5   | 0     |
| 2  | 10  | 0     |
| 3  | 15  | 0     |
| 4  | 20  | 0     |
| 5  | 25  | 0     |
| 6  | 30  | 7,5   |
| 7  | 35  | 15    |
| 8  | 40  | 22,5  |
| 9  | 45  | 30    |
| 10 | 50  | 37,5  |
| 11 | 55  | 45    |
| 12 | 60  | 52,5  |
| 13 | 65  | 60    |
| 14 | 70  | 67,5  |
| 15 | 75  | 75    |
| 16 | 80  | 82,5  |
| 17 | 85  | 90    |
| 18 | 90  | 97,5  |
| 19 | 95  | 105   |
| 20 | 100 | 112,5 |

2:

|   |                                |   |
|---|--------------------------------|---|
| 1 | $S = v \cdot t$                | 1 |
| 2 | $S_1 = 5 \cdot 5 = 25$         | 1 |
| 3 | $S = S_1 + v \cdot t$          | 3 |
| 4 | $S_1 + v \cdot t = v \cdot t,$ | 3 |
| 5 |                                | 2 |

10

3

18 /

,

"

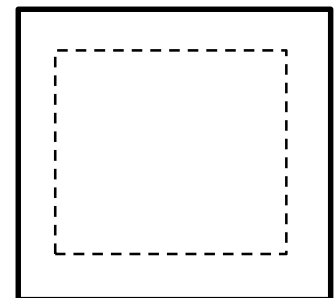
"

3

.

30

1



3

,

a -

a-2x ,

, x -

,

.

,

$$4(a-2x) \cdot 3 = 4 \cdot 3(a-2x) = Vt$$

$$x = \frac{a - \frac{V \cdot t}{4 \cdot 3}}{2}$$

$$x = 2,5$$

: 2,5

3:

|   |         |                      |   |
|---|---------|----------------------|---|
| 1 | a-2x    | 2                    |   |
| 2 | 4(a-2x) | 2                    |   |
| 3 | 3       | 4 \cdot 3(a-2x) = Vt | 3 |
| 4 |         |                      | 3 |

10

4

$$m_1 = 1$$

$$V_0 = 3$$

$$m_1 = 1300 \text{ g}$$

$$m_2 = 1100 \text{ g}$$

$$m_0 = 1000 \text{ g}$$

4

$$V = V_1 + V_2 \quad (1)$$

$m_1$

$m_x$

2

$$V = \frac{m_1 + m_x}{\rho_2} \quad (2)$$

$V_1$

1

$$V_1 = \frac{m_1}{\rho_1}$$

0

$$V_2 = \frac{m_x}{\rho_0}$$

$$\frac{m_1 + m_x}{\rho_2} = \frac{m_1}{\rho_1} + \frac{m_x}{\rho_0} \quad (3)$$

$$m_x = m_1 \cdot \frac{\rho_0 \cdot \rho_2 - \rho_1}{\rho_1 \cdot \rho_0 - \rho_2} \quad (4)$$

$$m_x = 1,538 \text{ g}$$

1,5

$$m_0 = \rho_0 \cdot V_0 = 3$$

$$m_0 - m_x = 3 - 1,5 = 1,5 \quad (5)$$

: 1,5

4:

|   |     |       |
|---|-----|-------|
| 1 | (1) | 2     |
| 2 |     | 2     |
| 3 | (3) | 2     |
| 4 | ,   | (4) 2 |
| 5 |     | 2     |