```
2013-2014
                          10 -11-
                          (
                                    )
            10
   1.
                                   ».
                                                   - 1
    ,
1 - 10
            20
                         «5:1».
                                        - 2
                                                           2 - 40
            10
                        «5:N».
                                          3 - 30
                          3
                      80
                                                - 60
                                                             120
                                         -220.
                                        - 300
1.
             1.
                               2.
2.
             1.
                     30
3.
                                         28
             1.
                               2.
4.
             1.
                               2.
5.
             1.
                               2.
6.
             1.
                               2.
7.
             1.
                               2.
```

```
8.
                                                                                    2.
                                     1.
                                                                  200%,
9.
                                                                                                                        50%,
                                            100%.
                                     1.
                                                                                  2.
10.
                                   1.
                                                                                  2.
                                                                                        50%.
1.
                             20%.
1.
                            30%;
2.
                            25%;
                            20%;
3.
4.
                            15%;
5.
                            10%.
2.
                                                                                                                                                         ?
1.
2.
3.
4.
5.
3.
       Цена
                                                                          MC
                                                                             AC
                                                                                         D
           P_1
           P_2
1. Q<sub>1</sub>, P<sub>1</sub>;
2. Q<sub>1</sub>, P<sub>2</sub>;
                                               Q_1
                                                          Q_2
                                                                        Q<sub>3</sub>
3. Q<sub>2</sub>, P<sub>1</sub>;
4. Q<sub>3</sub>, P<sub>1</sub>;
                                                                                                     (
5.
                           )
4.
1.
```

```
2.
3.
4.
5.
5.
                                                                                     500
     1976
                     ?
1.
2.
3.
4.
5.
                                                                      -1.
6.
                   20%
                                                                               2010
                                                                                                    2
                                                                                50%
                  30%
                                                            16
                                                      ,
2010
                                                                               20%
          ?
1.50%;
2.57%;
3. 64%;
4.67%;
5.75%.
7.
                                                     Q_s = 2p+4, \ Q_d = x-p,
                                 1.
1. 1;
2. 3;
3. 5;
4. 7;
5. 9.
                                                                                          2009
9.
                                        2010
                                                                             2009
   30%.
                                                  2010
                  30%;
1.
                 30%;
2.
3.
                 70%;
4.
5.
10.
1.
2.
                                                                                 ;
3.
4.
```

```
5.
                                                                              2
11.
                                  = Q^3 + 16, \qquad Q-
1. 12;
2. 2;
3.16;
4. 4;
5.
12.
1.
2.
3.
4.
5.
13.
1.
2.
3.
4.
5.
14.
1.
2.
3.
4.
5.
15.
                                                                                                                  20
                                                                                                       20%.
20,
               (-4).
1. -5
2. -3
3. -4
4. -8
5.
16.
1.
         P;
2.
         Q;
```

```
3.
4.
                                                                                 Q;
5.
                                                                                P;
                                                        C = 1 + \sqrt{Y} + 0,25Y.
17.
                                       — (-1).
     5,
                  — 3,
1.4;
2.9;
3. 16;
4. 25;
5. 36.
18.
                      40
                     : P = 50 - 2Q,
                                                   : P = 75 - 0.5Q.
1. P = 125 - 2,5Q;
2. P = 62,5 - 1,25Q;
3. Q_d = 50 - 0.8P;
4. Q_d = 175 - 2.5P;
5. Q_d = 125 - 2P.
                 (11) = 15;
19. (10) = 12;
                             (10) = ?
1. +3;
2. +28,5
3. +35;
4. -35;
5.
20.
1.
2.
3.
                                                               ;
4.
5.
                                      1.
                                                          :
                          ;
;
1.
2.
3.
                                            ;
4.
5.
2.
1.
                                                 ;
(0,0);
2.
3.
4.
5.
```

```
    3.
    1.
    2.
    3.

4. 5.
                                                                      AC = 0.7Q^2 - 20Q + 200 + 100 \backslash Q. 700;
4.
                      10
1.
2.
                                                                                               120;
3.
                                                      200;
                      4 12,5
4.
                                                                                                    624,8;
5.
5.
1.
2.
3.
4.
5.
6.
1.
2.
3.
4.
5.
7.
                                                                                                              :
1.
2.
                                                                                                                                           ;
3.
4.
5.
8.
1.
2.
3.
4. 5.
9.
1.
                                                                                1/3;
2.
                                                                                                                                    20;
                                                           60
3.
                                                    -2;
                                                                                                                                        180;
4.
                                                                60
                                              90
5.
```

```
10.
1.
2.
3.
4.
5.
1. (40
                    )
                                                                        8
                                                            6
                                                                                     , 288
                                                                     18
           ?
                                   : Q_d = a - bP; Q_s = dP.
                                                                     = 6.
         8 = Q_d - Q_{s=} (a - bP) - d = (-b \times 6) - d \times 6.
                                  -6b - 6d = 8,
                                       = 8 + 6(b + d).
                                                          288
                                                                              18
                               288 = P(Q_s - Q_d) = P[dP - (a - bP)]
        = 18,
                                18 \times [d \times 18 - (a - b \times 18)] = 288
                                     18d - a + 18b = 288
              = 8 + 6(b + c),
                                 18d - 8 - 6b - 18b + 18d = 16
                                        12(d+b) = 24
                                          d + b = 2
                                  = 8 + 6(b + d) = 8 + 6 \times 2 = 20
                                            = 20
                                           Q_d = Q_s.
                                         a - bP = dP
                                          = /(d+b)
                                         = 20/2 = 10.
                              10
```

(-2), ? 1. (TR_1) $: Q_d = a - bP.$ -2, $-2 = -B \frac{P}{a-BP},$ = /3b,: Q = 2a/3. $TR_1 = P \times Q = a/3b \times 2a/3 = 2a^2/9b$ $TR_1 = 2a^2/9b$ *2*. (TR_2) . -1. = /2b,: Q = 0.5a. $TR_2 = P \times Q = a/2b \times 0,5a = a^2/4b$ $TR_2 = a^2/4b$ *3*. $TR_2/TR_1 = a^2/4b : 2a^2/9b = 1,125 = 112,5\%$ 12,5%. a/b 2a/3b a/2b

C

0

a/3

a/2

MC=AC

Q

a

2. (40

$$TR_1 = P \times Q = 2a/3b \times a/3 = 2a^2/9b$$
$$TR_1 = 2a^2/9b$$

$$TR_2 = P \times Q = a/2b \times 0.5a = a^2/4b$$

$$TR_2 = a^2/4b$$

$$TR_2/TR_1 = a^2/4b : 2a^2/9b = 1,125 = 112,5\%$$

12,5%.

3.(40 50%

50%, 40% 10%. 10%, *12,5%*, 100%,

20%?

$$FC = 0.5TC = VC$$

$$TC_0 = 2FC$$

$$W_0 = 0.5VC_0 = 0.5FC$$

P
$$_0 = 0.4VC_0 = 0.4FC$$

P
$$_0 = 0.1VC_0 = 0.1FC$$

$$W_1 = 1.1 \times 0.5 \times FC = 0.55FC$$

P
$$_1 = 1,125 \times 0,4FC = 0,45FC$$

P
$$_1 = 2 \times 0.1FC = 0.2FC$$

$$TC_1 = FC + 0.55FC + 0.45FC + 0.2FC = 2.2FC$$

 $TC_1 = 1,1TC_0$

P = const; Q = const => TR = P*Q = const

$$Q = const => TR = P*Q = const$$

$$0 = \frac{TR - TC_0}{TC_0} = 0, 2 \qquad => TR = 1,2TC0 => TR = 2,4FC$$

$$\Delta = \frac{TR - TC_1}{TC_1} - 0, 2 = \frac{2,4FC - 2,2FC}{2,2FC} = \frac{2}{10} - \frac{1}{11} = \frac{22 - 10}{110} = \frac{6}{55}$$

4. (40

1.

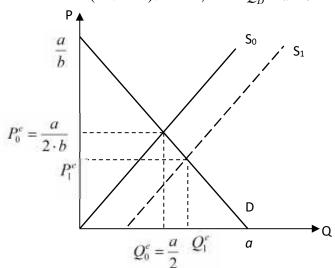
1/4.

 $1 (E_S = 1),$, . ., c – 1. $Q_S = c \cdot P (Q -).$, , P –

: $Q = d + c \cdot P, c > 0.$ $E_S = \frac{\partial Q_S}{\partial P} \cdot \frac{P^e}{O^e} = c \cdot \frac{P^e}{d + c \cdot P^e} = 1,$ d = 0.

 $|E_D|=1$, 2.

, $Q_D = a - b \cdot P$, a > 0, b > 0, $P_0^e = \frac{a}{2 \cdot b}$, $Q_0^e = \frac{a}{2}$.



3. 1,

 $Q_S = b \cdot P$.

 $\frac{a}{2} = c \cdot \frac{a}{2 \cdot b} \implies c = b.$ $Q_S = b \cdot P$.

 $Q_S^1 = b \cdot (P+4) = 4 \cdot b + b \cdot P$. 0,75 (

). : $E_S = \frac{\partial Q_S^1}{\partial P} \cdot \frac{P_1^e}{Q_1^e} = \frac{b \cdot P_1^e}{4 \cdot b + b \cdot P_1^e} = 0.75$. $Q_D(12) = Q_S^1(12)$, $P_1^e = 12$. $(P_1^e = 12)$

, $Q_1^e = 4 \cdot b + 12 \cdot b = 16 \cdot b$, $a - 12 \cdot b = 4 \cdot b + 12 \cdot b .$

 $a = 28 \cdot b$.

```
: Q_D = 28 \cdot b - b \cdot P.
                                                Q_0^e = \frac{a}{2} = \frac{28 \cdot b}{2} = 14 \cdot b.
                                                                        \frac{Q_1^e}{Q_0^e} = \frac{16 \cdot b}{14 \cdot b} = \frac{8}{7} \,.
                                          (
                                             \frac{1}{7} \cdot 100\% \approx 14,29\%.
                                                           \frac{1}{7} \cdot 100\% \approx 14,29\%.
:
5.(20
                                                                     25%.
                                                                               10%
        20%
                              ?
                                                                     S_{0,}
                                                            : S_1 = 1,25 S_0,
                                                             : S_2 = 0.9 S_1 = 0.9  1,25 S_0 = 1,125 S_0,
                                                                               : S_3 = 1,1 S_0
                                                                            : 1,125 S_0 - 1,1 S_0 = 0,025 S_0 .
                                                                                                   2,5 %.
                                                    2,5%.
                                              2011
```

_

,

.

2.

S S1,

3. : Qd = a - bP

: Qs = c + dP

a-bP = c + dP

=a-bP - dP (1)

(s) : a - bP = c + d(P + s)

- :

ds = bP + dP - bP - dP \vdots $s = (b/d + 1) \times (P - P).$

1. –

2. : $s = (b/d + 1) \times (P - P)$.