

$$f(x) = (x-2)(x+3)$$

$$f(x) = x^2 + 3x - 2x - 6$$

$$\boxed{f(x) = x^2 + x - 6}$$

$$x = 0 \quad y =$$

$$y = 0^2 - 0 - 6 = -6,$$

$$(0, -6)$$

$$, \quad , y = 0 \quad x =$$

$$0 = x^2 + x - 6$$

$$x_{1,2} = \frac{-1 \pm 5}{2}$$

$$x_1 = \frac{-1+5}{2} = \frac{4}{2} = 2 \rightarrow (2, 0)$$

$$x_2 = \frac{-1-5}{2} = \frac{-6}{2} = -3 \rightarrow (-3, 0)$$

$$\cdot (-3, 0), (2, 0), (0, -6) :$$

$$x = -\frac{b}{2a} :$$

$$x =$$

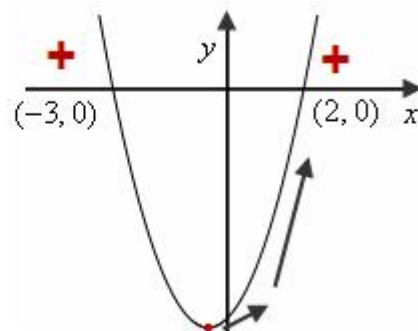
$$x = -\frac{1}{2} = -0.5$$

$$f(-0.5) = (-0.5)^2 + (-0.5) - 6 = -6.25 :$$

$$\cdot (-0.5, -6.25)$$

$$-6.25$$

:



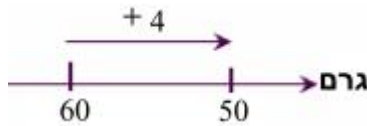
(מינימום לפי סוף סעיף ג')  $(-0.5, -6.25)$

$$\cdot x < -3 \quad x > 2 \quad f(x)$$

$$\cdot x > -0.5 \quad f(x)$$

$$M_t = M_0 \cdot q^t$$

.t .q ( )  
 . t - M<sub>t</sub> , - M<sub>0</sub>  
 . 60 06:00  
 . 50 10:00  
 t = 4 , 4 ,



$$50 = 60 \cdot q^4 \quad / : 60$$

$$0.8333 = q^4$$

$$\sqrt[4]{0.8333} = q$$

$$\boxed{q = 0.9554}$$

$$q = \frac{100 - P}{100} \quad ; ( \quad ) \quad P$$

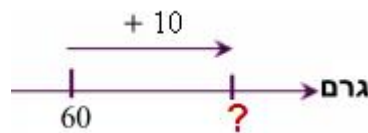
$$0.9554 = \frac{100 - P}{100} \quad / \cdot 100$$

$$95.54 = 100 - P$$

$$\boxed{P = 4.456}$$

. 4.456% :

. 10 , 16:00 .



$$M_{10} = 60 \cdot 0.9554^{10}$$

$$M_{10} = 38.02$$

. 38.02 16:00 :

:

$$\begin{aligned} x &\geq 0 \\ y &\geq 0 \\ y &\leq 2x + 4 \\ y &\leq -2x + 8 \\ y &\geq 2x \end{aligned}$$

$$\begin{aligned} \cdot y - & \quad x \geq 0 \\ \cdot x - & \quad y \geq 0 \end{aligned}$$

$$\begin{aligned} \cdot y - & \quad x = 0 \\ \cdot x - & \quad y = 0 \end{aligned}$$

$$\cdot y = 2x + 4$$

$$\cdot (0, 0) \quad 0 \leq 2 \cdot 0 + 4$$

1	-2	0	x
6	0	4	y

$$\begin{aligned} (x, y) & \quad (0, 0) \end{aligned}$$

$$\cdot y = -2x + 8$$

$$\cdot (0, 0) \quad 0 \leq -2 \cdot 0 + 8$$

4	1	0	x
0	6	8	y

$$\begin{aligned} (x, y) & \quad (0, 0) \end{aligned}$$

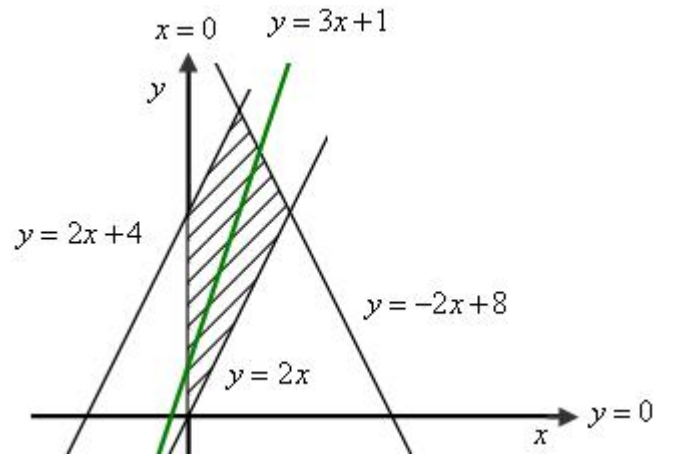
$$\cdot y = 2x$$

$$\cdot (1, 1) \quad 1 \not\geq 2 \cdot 1 \quad (x, y) \quad (1, 1)$$

3	1	0	x
6	2	0	y

$$(0, 0)$$

:



•  $f(x, y) = 3x - y + 6$  .

: ,5

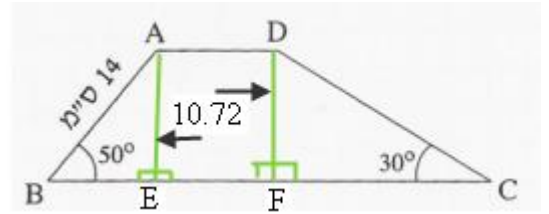
$$3x - y + 6 = 5$$

•  $3x + 1 = y$

$$y = 3x + 1$$

,  $y = 3x + 1$

2	1	0	x
7	4	1	y



, DF , AE ,

$\triangle ABE$

$$\sin \angle ABE = \frac{AE}{AB}$$

$$\sin 50^\circ = \frac{AE}{14}$$

$$14 \sin 50^\circ = AE$$

$$AE = 10.72$$

( ) DF = AE = 10.72

$\triangle DCF$

$$\sin \angle DCF = \frac{DF}{DC}$$

$$\sin 30^\circ = \frac{10.72}{DC}$$

$$DC \sin 30^\circ = 10.72$$

$$DC = \frac{10.72}{\sin 30^\circ}$$

$$\boxed{DC = 21.45}$$

. " 21.45 DC :

$$N = f_1 + f_2 + f_3 + \dots + f_n = 2 + 12 + x + 12 + 2 = 28 + x :$$

"	10	9	8	7	6	- x
N = 28 + x	2	12	x	12	2	- f

$$\bar{x} = \frac{x_1 \cdot f_1 + x_2 \cdot f_2 + x_3 \cdot f_3 + \dots + x_n \cdot f_n}{N} :$$

,	,	,
$8 = \frac{x_1 \cdot f_1 + x_2 \cdot f_2 + x_3 \cdot f_3 + \dots + x_n \cdot f_n}{N}$ $8 = \frac{6 \cdot 2 + 7 \cdot 12 + 8 \cdot x + 9 \cdot 12 + 10 \cdot 2}{28 + x}$ $8 = \frac{224 + 8x}{28 + x} \quad / \cdot (28 + x)$ $8(28 + x) = 224 + 8x$ $224 + 8x = 224 + 8x \quad o.k.$	$8$ $x = \frac{x_1 \cdot f_1 + x_2 \cdot f_2 + x_3 \cdot f_3 + \dots + x_n \cdot f_n}{N}$ $\bar{x} = \frac{6 \cdot 2 + 7 \cdot 12 + 9 \cdot 12 + 10 \cdot 2}{28}$ $\bar{x} = \frac{224}{28}$ $\bar{x} = 8$	$\bar{x} = \frac{224 + 8x}{28 + x} = \frac{8(28 + x)}{28 + x} = 8$

.8

1.

$$1 \quad S = \sqrt{\frac{(x_1 - \bar{x})^2 f_1 + (x_2 - \bar{x})^2 f_2 + \dots + (x_n - \bar{x})^2 f_n}{N}}$$

$$\frac{2}{3} = \sqrt{\frac{(6-8)^2 \cdot 2 + (7-8)^2 \cdot 12 + (8-8)^2 \cdot x + (9-8)^2 \cdot 12 + (10-8)^2 \cdot 2}{28+x}}$$

$$\frac{2}{3} = \sqrt{\frac{8+12+0+12+8}{28+x}}$$

$$\frac{2}{3} = \sqrt{\frac{40}{28+x}}$$

$$\left(\frac{2}{3}\right)^2 = \left(\sqrt{\frac{40}{28+x}}\right)^2$$

$$1 \quad \frac{4}{9} = \frac{40}{28+x} \quad / \cdot 9(28+x)$$

$$4(28+x) = 40 \cdot 9$$

$$112 + 4x = 360$$

$$4x = 248 \quad / : 4$$

$$\boxed{x = 62}$$

35002

10

610	520	1
622	532	2

$$S = 87, \bar{x} = 540 :$$

$$532 \quad (1)$$

$$z = \frac{x - \bar{x}}{s}$$

$$z = \frac{532 - 540}{87} = \frac{-8}{87} = -0.09$$

$$p(z < -0.09) = 0.464 :$$

$$p(z > -0.09) = 1 - 0.464 = 0.536, 532$$

$$.0.536 \quad 2 \quad , \quad :$$

$$622 \quad (2)$$

$$z = \frac{622 - 540}{87} = \frac{82}{87} = 0.94$$

$$p(z < 0.94) = 0.826 :$$

$$p(z > 0.94) = 1 - 0.826 = 0.174, 532$$

$$.0.174 \quad 2 \quad , \quad :$$

$$622 - 610, 2, 51, ,$$

$$z = \frac{622 - 540}{87} = \frac{82}{87} = 0.94$$

$$p(z < 0.94) = 0.826$$

$$z = \frac{610 - 540}{87} = \frac{70}{87} = 0.80$$

$$p(z < 0.80) = 0.788$$

$$p(610 < x < 622) = 0.826 - 0.788 = 0.038$$

$$.0.038, 2, 1, , :$$

