

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

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

$$C(3, 9), y_C = -3^2 + 6 \cdot 3 = 9 \quad x_C = \frac{-6}{2 \cdot (-1)} = 3$$

(3, 9) , C , :

$$B - A \quad y = -x^2 + 6x \quad y = 5$$

$$y = 5$$

$$5 = -x^2 + 6x$$

$$x^2 - 6x + 5 = 0$$

$$x_{1,2} = \frac{-(-6) \pm \sqrt{(-6)^2 - 4 \cdot 1 \cdot 5}}{2 \cdot 1}$$

$$x_{1,2} = \frac{6 \pm 4}{2}$$

$$x_1 = \frac{6+4}{2} = \frac{10}{2} = 5 \rightarrow \boxed{B(5, 5)}$$

$$x_2 = \frac{6-4}{2} = \frac{2}{2} = 1 \rightarrow \boxed{A(1, 5)}$$

B(5, 5) , A(1, 5) :

$$y - \quad CD \quad (1)$$

$$h = 9 - 5 = 4$$

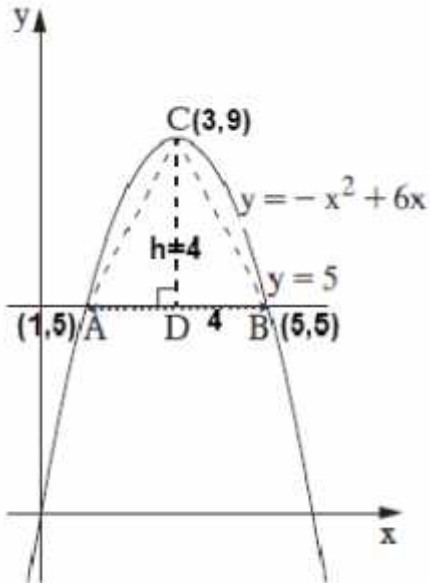
$$4 \quad \Delta ABC - CD \quad :$$

$$\Delta ABC \quad (2)$$

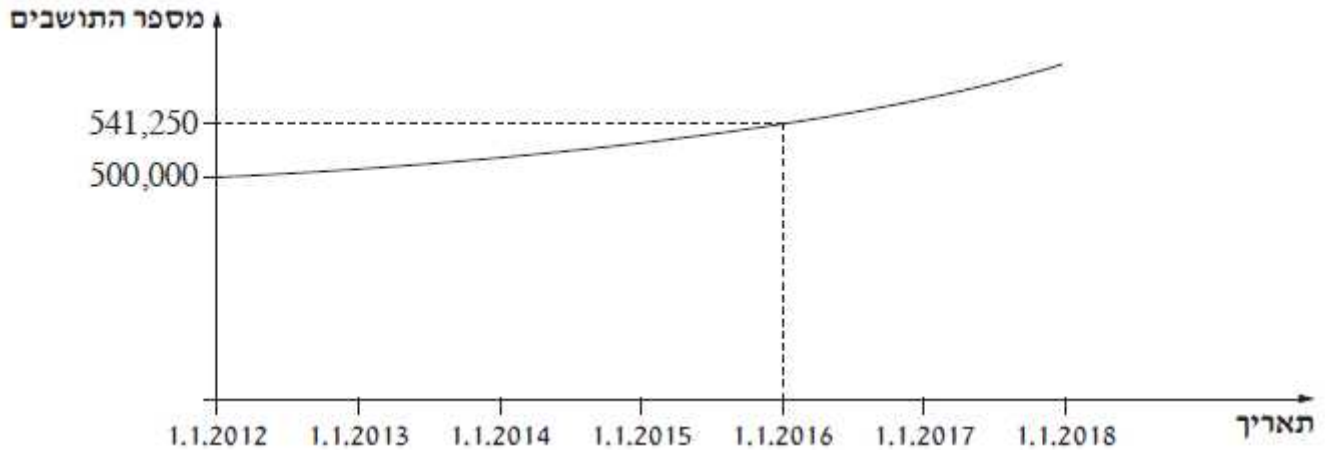
$$AB = x_B - x_A = 5 - 1 = 4$$

$$S_{\Delta ABC} = \frac{AB \cdot CD}{2} = \frac{4 \cdot 4}{2} = 8$$

$$" \quad 8 \quad ABC \quad :$$



**האוכלוסייה בעיר גדלה, בכל שנה, באופן מעריכי.
הערך שלפנינו מתאר את גודל האוכלוסייה
מ- 1.1.2012 עד 1.1.2018.**



500,000 , 1.1.2012 , (1) .

541,250 , 1.1.2016 , (2)

(1) .

M_t	M_0	q	t
541,250	500,000	?	4

$541,250 = 500,000 \cdot q^4 \quad / : 500,000$

$\frac{541,250}{500,000} = q^4$

$1.0825 = q^4$

$q = \sqrt[4]{1.0825}$

$q = 1.02$

1.02

(2)

$1.02 = \frac{100+P}{100} \quad / \cdot 100$

$102 = 100 + P \quad / -100$

$P = 2$

2% -

.1.1.2018 6 , 1.1.2018 .

M_t	M_0	q	t
?	500,000	1.02	6

$$M_6 = 500,000 \cdot 1.02^6$$

$$M_6 \sim 563,081$$

.563,081- , 1.1.2018 :

$$a_1 = 7000$$

$$a_4 = 7246$$

$$a_n = a_1 + (n-1)d$$

$$a_4 = a_1 + (4-1) \cdot d$$

$$7246 = 7000 + 3 \cdot d$$

$$246 = 3 \cdot d \quad /:3$$

$$\boxed{d = 82}$$

$$82$$

$$a_{12}$$

$$a_n = a_1 + (n-1)d$$

$$a_{12} = a_1 + (12-1) \cdot d$$

$$a_{12} = 7000 + 11 \cdot 82$$

$$\boxed{a_{12} = 7902}$$

$$7,902$$

$$1 \cdot S_{12}$$

$$S_n = \frac{n[2a_1 + d(n-1)]}{2}$$

$$S_{12} = \frac{12[2 \cdot 7000 + 82(12-1)]}{2}$$

$$S_{12} = \frac{12[14000 + 902]}{2}$$

$$\boxed{S_{12} = 89412}$$

$$89,412$$

BG - AE .

ΔADE

$$\sin \sphericalangle ADC = \frac{AE}{AD}$$

$$\sin 60^\circ = \frac{AE}{4}$$

$$4 \sin 60^\circ = AE$$

$$\boxed{AE = 2\sqrt{3} \sim 3.464}$$

" $2\sqrt{3} \sim 3.464$:

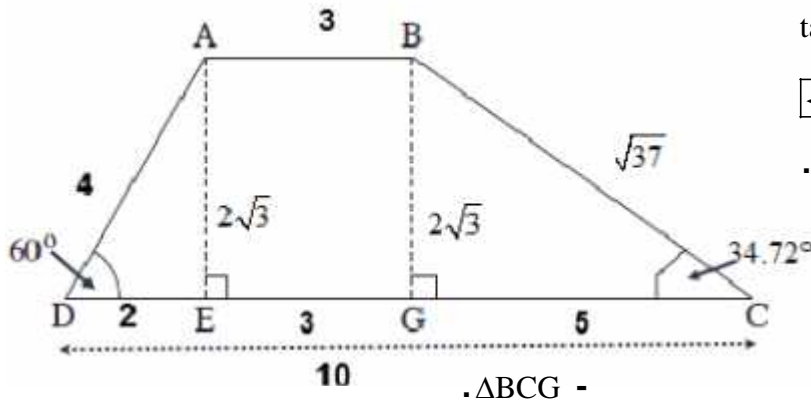
. BG = " $2\sqrt{3}$, ABGE .

ΔBCG

$$\tan \sphericalangle BCG = \frac{BG}{GC} = \frac{2\sqrt{3}}{5}$$

$$\boxed{\sphericalangle BCG \sim 34.72^\circ}$$

. 34.72° - BCG :



. ΔBCG -

, BC

(1) .

$$(BG)^2 + (GC)^2 = (BC)^2$$

$$(2\sqrt{3})^2 + 5^2 = (BC)^2$$

$$37 = (BC)^2$$

$$\boxed{BC = \sqrt{37} \sim 6.083}$$

. " $\sqrt{37} \sim 6.083$ BC :

. ΔADE -

, DE

(2)

$$(AE)^2 + (DE)^2 = (AD)^2$$

$$(2\sqrt{3})^2 + (DE)^2 = 4^2$$

$$(DE)^2 = 4$$

$$\boxed{DE = 2cm}$$

. CD = 2 + 3 + 5 = " 10

$$P_{ABCD} = AD + DC + BC + AB = 4 + 10 + \sqrt{37} + 3 = " 17 + \sqrt{37} \sim 23.08 :$$

. " $17 + \sqrt{37} \sim 23.08$ ABCD :

"

36 "

(1,1)	(1,2)	(1,3)	(1,4)	(1,5)	(1,6)
(2,1)	(2,2)	(2,3)	(2,4)	(2,5)	(2,6)
(3,1)	(3,2)	(3,3)	(3,4)	(3,5)	(3,6)
(4,1)	(4,2)	(4,3)	(4,4)	(4,5)	(4,6)
(5,1)	(5,2)	(5,3)	(5,4)	(5,5)	(5,6)
(6,1)	(6,2)	(6,3)	(6,4)	(6,5)	(6,6)

:() 6
 (6,6) , (5,5) , (4,4) , (3,3) , (2,2) , (1,1)

$$p = \frac{6}{36} = \frac{1}{6}$$

$$\frac{1}{6}$$

. 7

. (6,1) , (5,2) , (4,3) , (3,4) , (2,5) , (1,6) :() 6

$$p = \frac{6}{36} = \frac{1}{6} :$$

$$\frac{1}{6} \quad 7$$

. 6

. (6,1) , (3,2) , (2,3) , (1,6) : 4

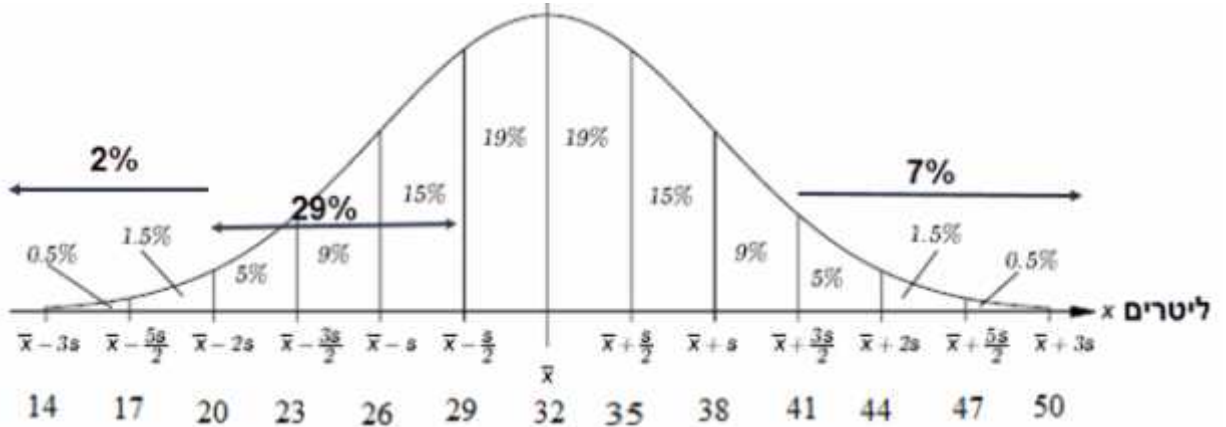
$$p = \frac{4}{36} = \frac{1}{9} :$$

$$\frac{1}{9} \quad 6$$

41 - 7% -
 $.0.5\% + 1.5\% + 5\% = 7\%$,

$\frac{3}{2}$ 41 ,

$\frac{6}{2} = 3$ 6



$41 - \frac{3}{2} \cdot 6 = 32$

32 :

2 , 20 - ,
 7% ,

$.0.5\% + 1.5\% = 2\%$,

20 - 2% :

$.5\% + 9\% + 14\% = 29\%$.

29 - , 20 - 29% :

41 - 7% , 400 .

$.7\% \cdot 400 = \frac{7}{100} \cdot 400 = 28$,

41 - 28 :