

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

$$: x = 0 \quad y -$$

$$y = -0^2 + 0 + 6 = 6 \rightarrow \boxed{(0, 6)}$$

$$: y = 0 \quad x -$$

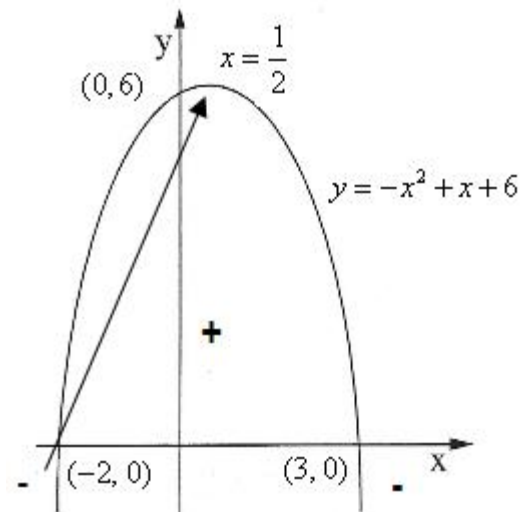
$$0 = -x^2 + x + 6$$

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

$$x_1 = \frac{4}{-2} = -2 \rightarrow \boxed{(-2, 0)}$$

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

. $(3, 0)$, $(-2, 0)$, $(0, 6)$:



$$, -2 < x < 3$$

. $(0, 6)$

. 6

, $x = 0$:

$$x_k = \frac{-b}{2a} = \frac{-1}{2 \cdot (-1)} = \frac{-1}{-2} = \frac{1}{2}$$

. $x < \frac{1}{2}$:

$$d = 160 - a_1 = 1,400 : , \quad 1,400 \quad (\quad)$$

$$, \quad (\quad) 12 -$$

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

$$: \quad 12 -$$

$$a_{12} = 1400 + (12-1) \cdot 160$$

$$a_{12} = 1400 + 11 \cdot 160$$

$$\boxed{a_{12} = 3160}$$

$$. \quad (\quad) 12 - \quad 3,160 \quad :$$

$$, (\quad)$$

$$. S_{12} ,$$

$$S_n = \frac{n(a_1 + a_n)}{2}$$

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

$$S_{12} = \frac{12(1400 + 3160)}{2}$$

$$S_{12} = \frac{12[2 \cdot 1400 + 160 \cdot (12-1)]}{2}$$

$$S_{12} = 6 \cdot 4560$$

$$S_{12} = 6 \cdot (2800 + 1760)$$

$$S_{12} = 6 \cdot 4560$$

$$\boxed{S_{12} = 27360}$$

$$\boxed{S_{12} = 27360}$$

$$. 27,360 \quad :$$

$$. (\quad) \quad 850$$

$$. 27,360 , ,$$

$$850 \cdot 27360 = \quad 23,256,000 :$$

$$. (\quad) \quad 23,256,000 \quad :$$

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

$q = \frac{100+P}{100}$

499,000 (2012)
 2.5%

$$q = \frac{100+2.5}{100} = \frac{102.5}{100} = 1.025$$

2012 7 , 2019

| M_t | M_0 | q | t |
|-------|---------|-------|-----|
| ? | 499,000 | 1.025 | 7 |

$$M_7 = 499,000 \cdot 1.025^7$$

$$M_7 \approx 593,154$$

593,154 - 2019 :

537,368 (2012)

| M_t | M_0 | q | t |
|---------|---------|-------|-----|
| 537,368 | 499,000 | 1.025 | ? |

$$537,368 = 499,000 \cdot 1.025^t$$

$$499,000 \cdot 1.025^2 = 524,261 \neq 537,368$$

$$499,000 \cdot 1.025^3 = 537,368$$

537,368 (2012) 3

2012 3 :

2.5% -

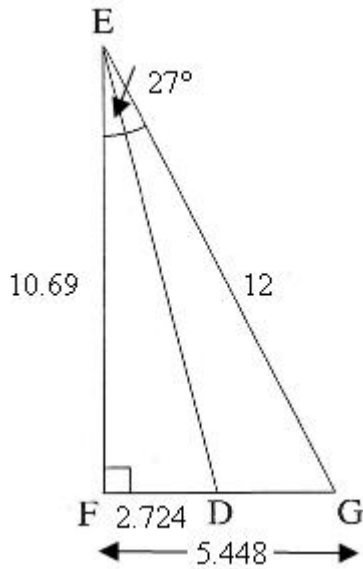
_____ - 2012

2.5% - ,

_____ - 2013

2.5% -

(25% 28% , 1.28 $1.025^{10} = 1.28$)



$$FD = \frac{5.448}{2} = 2.724$$

:FG

ΔEFG

$$\sin \angle FEG = \frac{FG}{EG}$$

$$\sin 27^\circ = \frac{FG}{12} \quad / \cdot 12$$

$$12 \sin 27^\circ = FG$$

$$FG = 5.448$$

$$5.448 \quad FG$$

.EF

ΔEFG

$$\cos \angle FEG = \frac{EF}{EG}$$

$$\cos 27^\circ = \frac{EF}{12} \quad / \cdot 12$$

$$12 \cos 27^\circ = EF$$

$$EF = 10.69$$

:EDF

ΔEFD

$$\tan \angle EDF = \frac{EF}{FD}$$

$$\tan \angle EDF = \frac{10.69}{2.724}$$

$$\angle EDF = 75.7^\circ$$

$$75.7^\circ \quad \angle EDF$$

$$(x+10) \cdot 75 + x \cdot 25 = 35 \cdot 100$$

| | | |
|--------|-----|-------|
| | | |
| $x+10$ | x | x_i |
| 75 | 25 | f_i |

$$\bar{x} = 35$$

$$25 + 75 = 100$$

$$\bar{x} = \frac{x_1 f_1 + x_2 f_2 + \dots + x_n f_n}{n}$$

$$35 = \frac{x \cdot 25 + (x+10) \cdot 75}{100} \quad / \cdot 100$$

$$3500 = 25x + 75x + 750$$

$$2750 = 100x \quad / : 100$$

$$\boxed{x = 27.5}$$

$$27.5$$

$$37.5$$

$$37.5$$

$$27.5$$

$$10$$

$$25$$

$$75$$

$$37.5$$

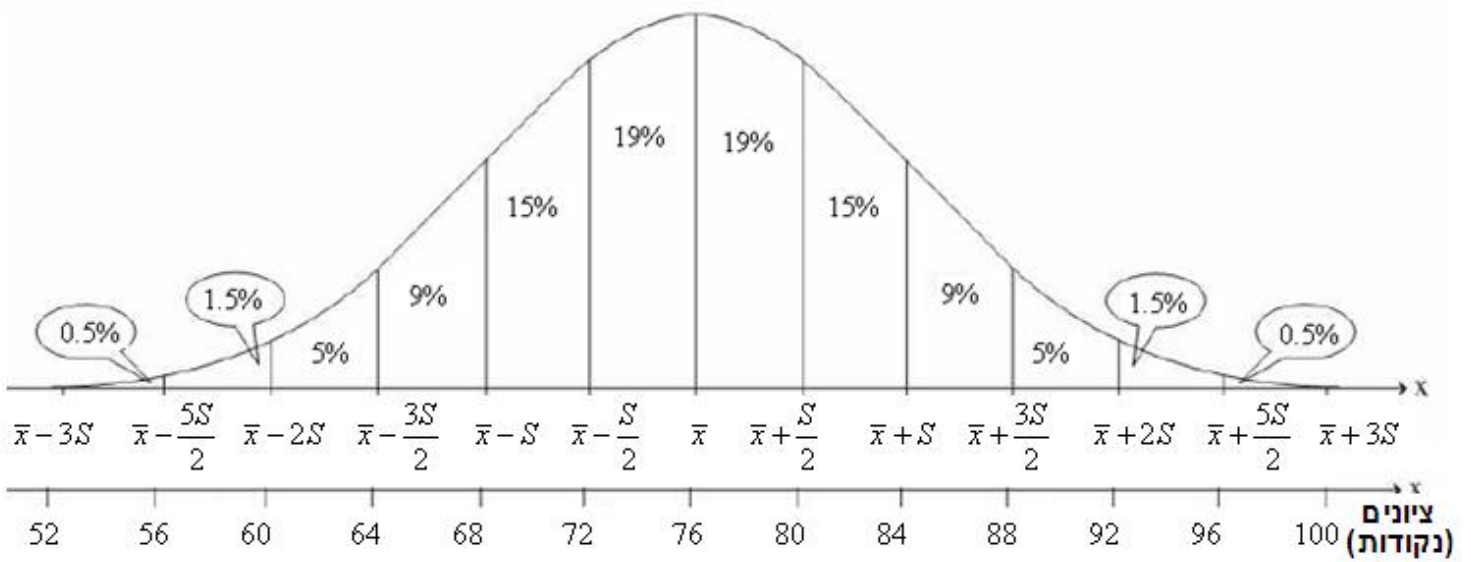
$$37.5$$

$\bar{x} = 76 \quad s = 8 :$

()

$\frac{8}{2} = 4$

8



.84

20% -

$,9\% + 5\% + 1.5\% + 0.5\% = 16\% :$

$.15\% + 0.5\% = 2\% ,92$ 2%

92 :

$\frac{2}{100} = 0.02$

$,0.5\% + 1.5\% = 2\%$ 60

$(n) \quad (0.02) \quad , \quad 60 \quad 384$

.384

$0.02 \cdot n = 384 \quad / : 0.02$

$n = 19200$

19,200 - :