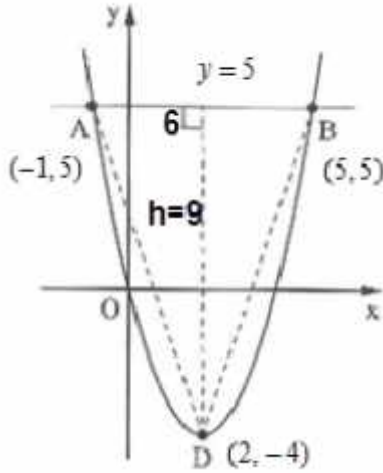


. B - A

$$y = x^2 - 4x$$

$$y = 5$$

$$y = 5$$



$$5 = x^2 - 4x$$

$$0 = x^2 - 4x - 5$$

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

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

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

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

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

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

x -

. D(2, -4)

$$, y_D = 2^2 - 4 \cdot 2 = -4 \quad x_D = \frac{-(-4)}{2 \cdot 1} = 2 ,$$

. (2, -4) D :

. y -

ADB

AB

$$. h = 5 - (-4) = 9$$

. 9 ADB

AB

:

. ABD

$$AB = x_B - x_A = 5 - (-1) = 6$$

$$S_{\triangle ABD} = \frac{AB \cdot h}{2} = \frac{6 \cdot 9}{2} = 27$$

. " 27 ABD :

.	10 -	2,	12	.
.	12 -	2,	14	.
.	14 -	2,	16	.
.	16 -	2,	18	.

$d = 2$,

2 -

$a_1 = 10$, 10

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

a_{16} , 16

$a_{16} = a_1 + (16-1)d$

$a_{16} = 10 + 15 \cdot 2$

$a_{16} = 40$

40 16 - :

$S_n = 486$, 486 **(2)**

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

$486 = \frac{n[2 \cdot 10 + 2 \cdot (n-1)]}{2} \quad / \cdot 2$

$972 = n[20 + 2 \cdot (n-1)]$

$972 = n(20 + 2n - 2)$

$972 = n(18 + 2n)$

$972 = 18n + 2n^2$

$0 = 2n^2 + 18n - 972$

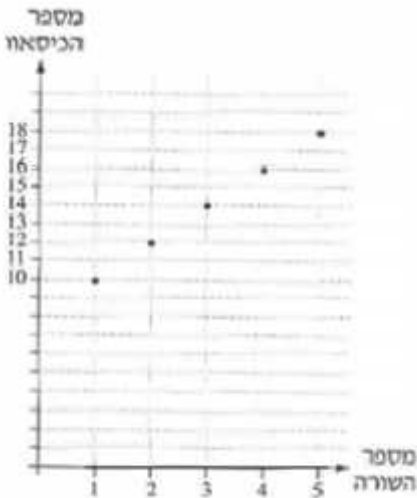
$n_{1,2} = \frac{-18 \pm \sqrt{18^2 - 4 \cdot 2 \cdot (-972)}}{2 \cdot 2}$

$n_1 = \frac{-18 + 90}{4} = \frac{72}{4} = 18$

$n_2 = \frac{-18 - 90}{4} = \frac{-108}{4} = -27 \leftarrow n > 0$

.18

:



6 65°C - , 100°C

M_t	M_0	q	t
65	100	?	6

$$65 = 100 \cdot q^6 \quad /:100$$

$$\frac{65}{100} = q^6$$

$$0.65 = q^6$$

$$q = \sqrt[6]{0.65}$$

$$\boxed{q = 0.9307}$$

0.9307

3

M_t	M_0	q	t
?	100	0.9307	3

$$M_3 = 100 \cdot 0.9307^3$$

$$\boxed{M_3 \approx 80.62}$$

80.62°C

3,

25

M_t	M_0	q	t
?	100	0.9307	25

$$M_{25} = 100 \cdot 0.9307^{25}$$

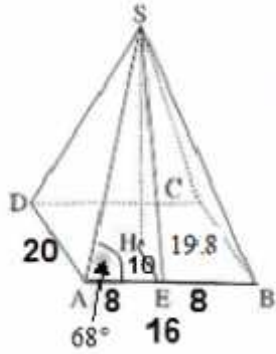
$$\boxed{M_{25} \approx 16.61}$$

16.61°C

25 ,

. 15°C

25 - (3)



. SAB , SE .
 . $AE = \frac{AB}{2} = \frac{16}{2} = 8$, SE

ΔSAE
 $\tan \sphericalangle SAE = \frac{SE}{AE}$
 $\tan \sphericalangle 68^\circ = \frac{SE}{8} \quad / \cdot 8$
 $8 \tan \sphericalangle 68^\circ = SE$
 $SE = 19.8$
 . SE = 19.8 :

. $\sphericalangle SEH$, SABCD SE
 H ,

. $EH = \frac{AD}{2} = \frac{20}{2} = 10$

ΔSEH
 $\cos \sphericalangle SEH = \frac{EH}{SE}$
 $\cos \sphericalangle SEH = \frac{10}{19.8}$
 $\sphericalangle SEH = 59.67^\circ$

. 59.67 SABCD SE :

. , SH ,

ΔSEH
 $(SH)^2 + (EH)^2 = (SE)^2$
 $(SH)^2 + 10^2 = 19.8^2$
 $(SH)^2 = 292.04$
 $SH = 17.09$

. $S_{\Delta SEH} = \frac{EH \cdot SH}{2} = \frac{10 \cdot 17.09}{2} = 85.45$
 . " 85.45 SEH :

. 3:4

42

4x

3x -

$$3x + 4x = 42$$

$$7x = 42 \quad /:7$$

$$x = 6$$

$$3x = 3 \cdot 6 = 18 -$$

$$4x = 4 \cdot 6 = 24 -$$

6

"			
7	3	4	
42	18	24	

$$24 - 18 :$$

"			
	170	160	(")
42	18	24	

:

$$\bar{x} = \frac{160 \cdot 24 + 170 \cdot 18}{42}$$

$$\bar{x} = \frac{6900}{42}$$

$$\bar{x} = 164.3$$

. " 164.3

. " 165

. " 164.3 -

(1).

, 370 - 16% , 430 - 16% _____

$$\frac{370+430}{2} = \frac{800}{2} = 400$$

. 400 :

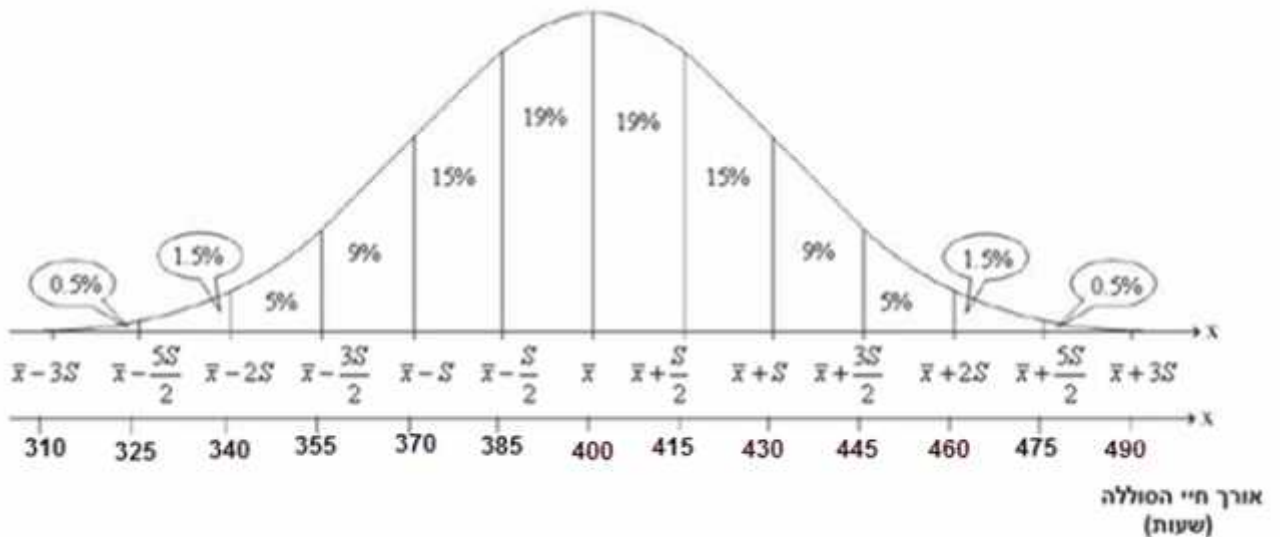
.0.5% + 1.5% + 5% + 9% = 16% , (2)

. 400 370 ,

$$.400 - 370 = 30 :$$

. 30 :

$$\frac{S}{2} = \frac{30}{2} = 15$$



$$.0.5% + 1.5% = 2% -$$

. 340 :

. 5% + 1.5% + 0.5% = 7% , 445 - ,

. 445 - 7% - :

. 1000 .

$$7\% = \frac{7}{100} = 0.07 - . 445 - 7\% -$$

$$. 0.07 \cdot 1000 = 70$$

. 445 - 70 - :

"