

$$y = 4x^2 - 20x + 24$$

$$y = 4x^2 - 20x + 24$$

$$y = 0$$

$$4x^2 - 20x + 24 = 0$$

$$x_{1,2} = \frac{20 \pm 4}{2 \cdot 4}$$

$$x_1 = \frac{20+4}{8} \rightarrow \boxed{(3, 0)}$$

$$x_2 = \frac{20-4}{8} \rightarrow \boxed{(2, 0)}$$

• (3, 0), (2, 0):

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

$$y_D = 4 \cdot 2.5^2 - 20 \cdot 2.5 + 24 = -1 \quad x_D = \frac{-(-20)}{2 \cdot 4} = \frac{20}{8} = 2.5$$

• D(2.5, -1)

• D(2.5, -1):

1 A x -

$$y_A = 4 \cdot 1^2 - 20 \cdot 1 + 24 = 8 \rightarrow \boxed{A(1, 8)}$$

• A(1, 8):

• $x = 0$, AD

, A(1, 8) - , $x < 1$

• $x = 3$, AD

, D(2.5, -1) - , $x > 2.5$

• $x = 0$: :

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

.t .q ()
 . t - M_t , - M_0
 $q = \frac{100+P}{100}$: ,() P

, 1.1.2011 - 1.1.2010 -
 665,500 , 3 , 1.1.2013 , 500,000 1.1.2010

M_t	M_0	q	t
665,500	500,000	?	3

$$665,500 = 500,000 \cdot q^3 \quad / : 500,000$$

$$\frac{665,500}{500,000} = q^3$$

$$1.331 = q^3$$

$$q = \sqrt[3]{1.331}$$

$$q = 1.1$$

$$1.1 = \frac{100+P}{100} \quad / \cdot 100$$

$$110 = 100 + P$$

$$P = 10\%$$

.1.1.2011 - 1.1.2010 - 10% - :

732,050 1.1.2010 -

M_t	M_0	q	t
732,050	500,000	1.1	?

$$732,050 = 500,000 \cdot 1.1^t$$

$$500,000 \cdot 1.1^1 = 550,000$$

$$500,000 \cdot 1.1^2 = 605,000$$

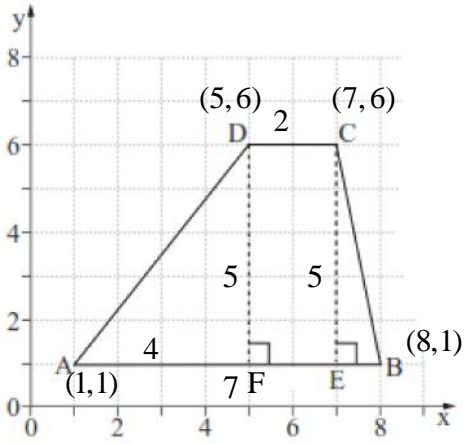
$$500,000 \cdot 1.1^3 = 665,500$$

$$500,000 \cdot 1.1^4 = 732,050$$

732,050 1.1.2010 - 4 :

.() ,
 .D(5,6) , C(7,6) , B(8,1) , A(1,1) :

. AF = 4 , CE = DF = 5 , BE = 1



$\triangle ADF$

$$\tan \sphericalangle DAB = \frac{DF}{AF}$$

$$\tan \sphericalangle DAB = \frac{5}{4}$$

$$\sphericalangle DAB = 51.34^\circ$$

$\triangle CBE$

$$\tan \sphericalangle CBA = \frac{CE}{EB}$$

$$\tan \sphericalangle CBA = \frac{5}{1}$$

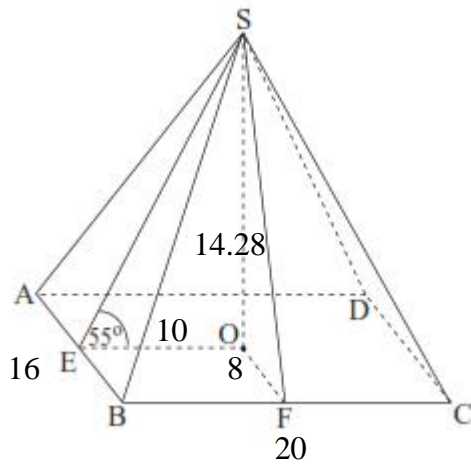
$$\sphericalangle CBA = 78.69^\circ$$

. $\sphericalangle DAB = 51.34^\circ$, $\sphericalangle CBA = 78.69^\circ$:

. CD = 2 , AB = 7

$$S_{ABCD} = \frac{(AB + CD) \cdot CE}{2} = \frac{(7 + 2) \cdot 5}{2} = 22.5 :$$

.22.5 :



.SO

O ,

$$FO = \frac{AB}{2} = \frac{16}{2} = 8 \quad EO = \frac{BC}{2} = \frac{20}{2} = 10$$

ΔSEO

$$\tan \angle SEO = \frac{SO}{EO}$$

$$\tan 55^\circ = \frac{SO}{10}$$

$$10 \tan 55^\circ = SO$$

$$\boxed{SO = 14.28}$$

. " 14.28 :

. SABCD

$$V_{SABCD} = \frac{AB \cdot BC \cdot SO}{3} = \frac{16 \cdot 20 \cdot 14.28}{3} = 1523.2$$

. " 1523.2 SABCD :

. ∠SFO , SF

ΔSOF

$$\tan \angle SFO = \frac{SO}{OF}$$

$$\tan \angle SFO = \frac{14.28}{8}$$

$$\boxed{\angle SFO = 60.74^\circ}$$

. 60.74° ∠SFO :

. SF ≠ SE ,

.(SF SE -

ΔSFO

$$\cos \angle SFO = \frac{FO}{SF}$$

$$\cos 60.74^\circ = \frac{8}{SF}$$

$$SF = \frac{8}{\cos 60.74^\circ}$$

$$SF = 16.37$$

ΔSEO

$$\cos \angle SEO = \frac{EO}{SE}$$

$$\cos 55^\circ = \frac{10}{SE}$$

$$SE = \frac{10}{\cos 55^\circ}$$

$$SE = 17.43$$

.SF ≠ SE :

"

90	80	70	60	
1	11	x	7	

$$N = f_1 + f_2 + \dots + f_n :$$

$$N = 7 + x + 11 + 1$$

$$N = 19 + x$$

.72.5

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

$$72.5 = \frac{60 \cdot 7 + 70 \cdot x + 80 \cdot 11 + 90 \cdot 1}{19 + x} \quad / \cdot (19 + x)$$

$$72.5(19 + x) = 1390 + 70x$$

$$1377.5 + 72.5x = 1390 + 70x$$

$$2.5x = 12.5 \quad / : 2.5$$

$$x = \frac{12.5}{2.5}$$

$$\boxed{x = 5}$$

. $x = 5$:

. 80 ,

.80 :

$$. 1 + 11 + 5 + 7 = 24$$

.24 :

: .

90	80	70	60	
1	11	5	7	
24	23	12	7	

$$\frac{n}{2} = \frac{24}{2} = 12 : ,$$

,13 - 12 -

$$\frac{70+80}{2} = 75 :$$

. 75 :

$$. 11+1=12$$

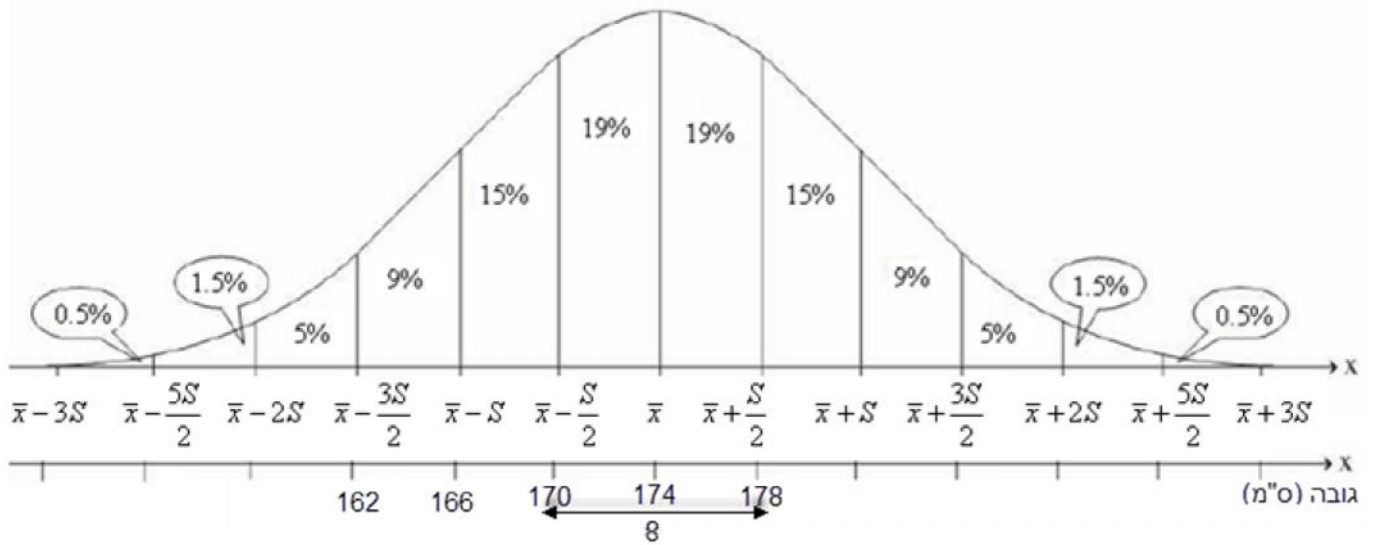
80 .

$$. \frac{12}{24} = 0.5$$

80 ,

. 0.5 :

. " 178 - 69% (1) .
 .50% + 19% = 69% ,
 . " 178 ,
 . " 170 - 69%
 .50% + 19% = 69% ,
 . " 170 ,
 " 170 - " 178 : ____

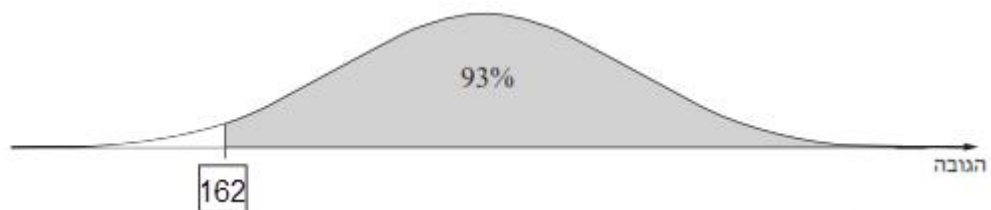


. " 8 ,
 . $\bar{x} = 170 + 4 \rightarrow \bar{x} = 174$: $\frac{S}{2} = 4$ $S = 8$ -
 . " 174 :
 . " 8 : (2)

$\bar{x} = 174$ $S = 8$: (1) .

7% - , 93% -
 .0.5% + 1.5% + 5% = 7% ,

. () $174 - \frac{3}{2} \cdot 8 = 162$: $\frac{3}{2} S$



. 7% " 162 (2)