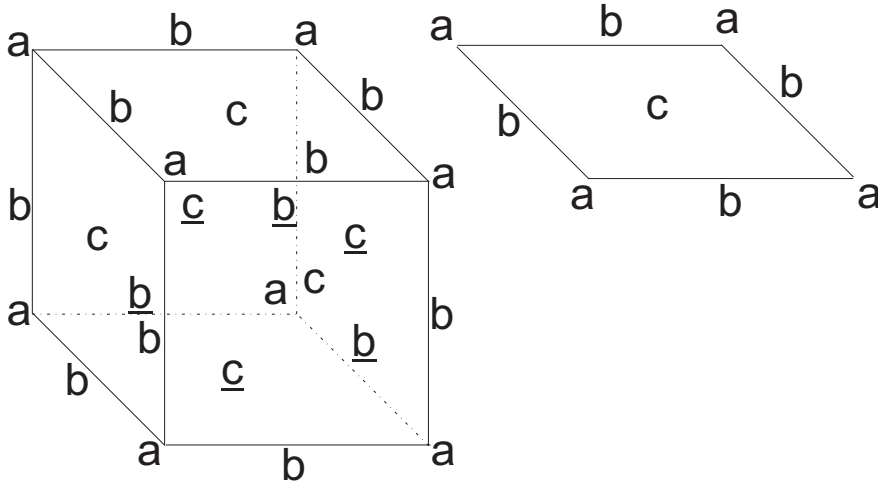


..Natural point,

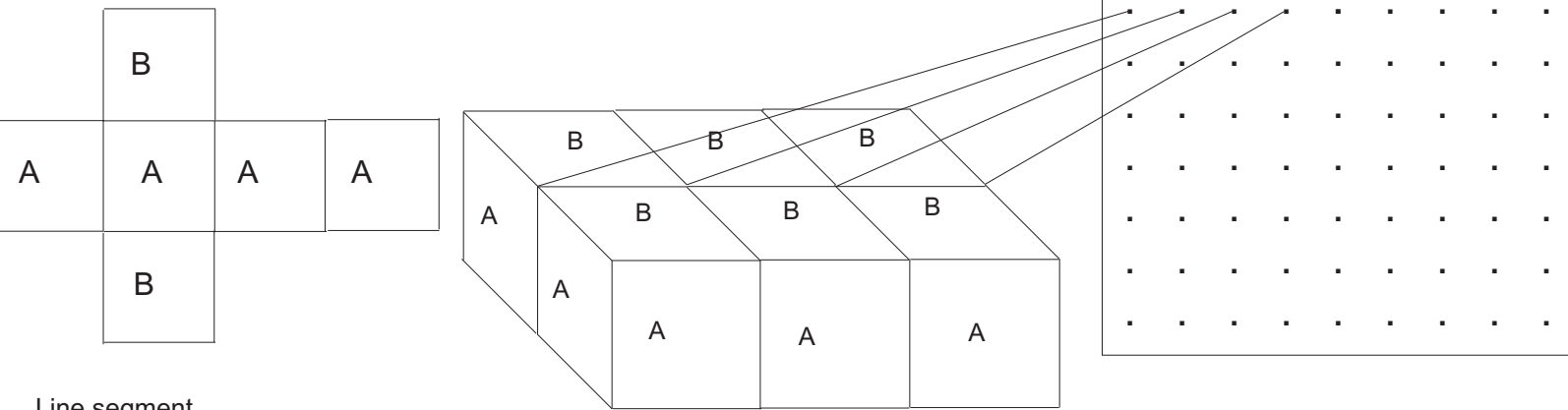
Natural point (basic volume measure) consists of:

- a) point vertex (8 pieces).
- b) basic measure of the lineal preview (12 pieces).
- c) basic measure of the surfactant preview (6 pieces).



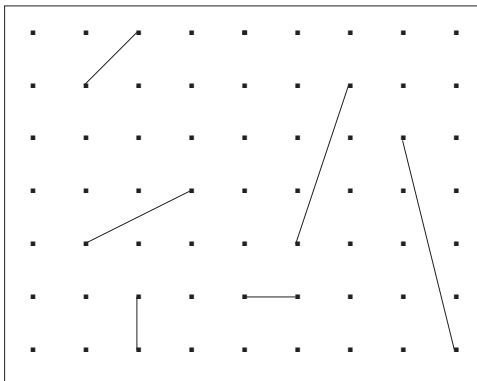
..Natural plane,

natural plane is the endless aggregate of the natural points that are mutually linked by a basic measure of the surfactant preview (A), upper and lower basic measures the surfactant preview (B) are the faces of the planes and there plane mathematics takes place. Natural plane is shown as rectangle on which vertex of the points can be seen.



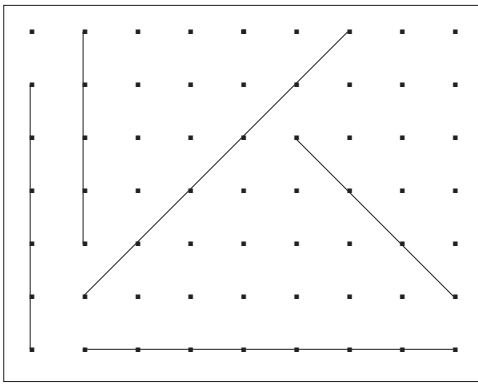
..Line segment,

link between two points vertex is a line segment.

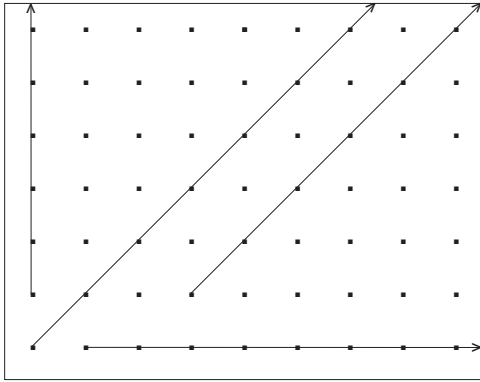


..The cycle of the 2 vertex points

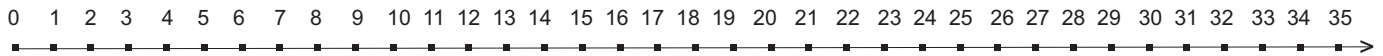
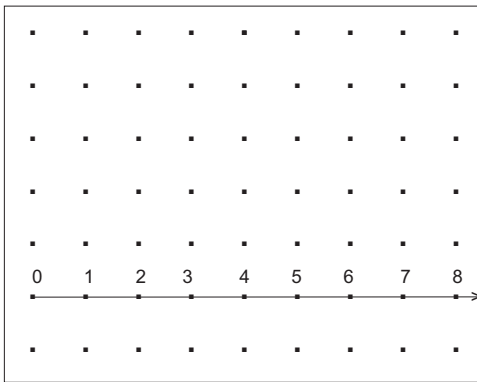
The line segment that spreads from its two vertex points without changing direction is a cycle of the 2 vertex points. Every next vertex point that joins to the cycle must be in the same direction as in cycle of the 2 vertex points. The line segment that links cycle and new vertex of the point must be of equal length as between vertexes in cycle of the 2 vertex points .



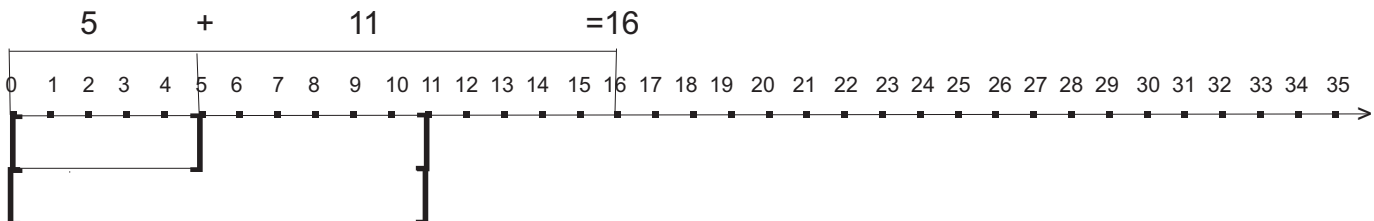
..Semi-line,
the cycle of the 2 vertex points that spreads endlessly in one direction is a semi-line.



..Numbered semi-line,
semi-line made of the basic measure of the linear preview is numbered semi-line, vertex points are the numbers showing how much they are far from the starting vertex point(0). We are applying decimal numbers system (natural numbers) $N(+)=\{0,1,2,3,4,5,6,7,8,\dots\}$

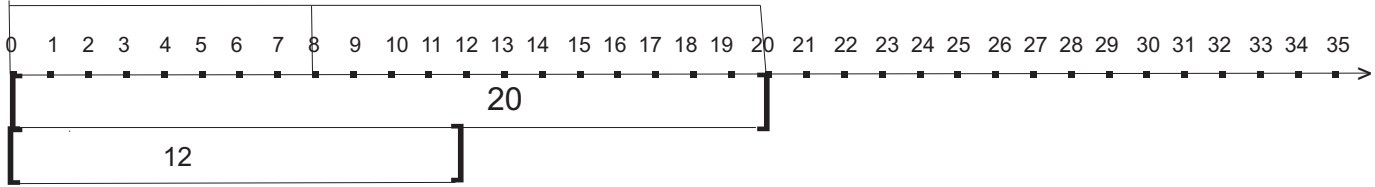


..Basic calculation operations,
addition is when to a number on a numbered semi-line we add another number on a numbered semi-line on the right, new-made number is a result $5+11=16$
deduction is when to a number on a numbered semi-line we add another number on a numbered semi-line on the left, new-made number is a result $20-12=8$, deduction in natural numbers is limited by number 0.



20-12=8

12



..addition forms,

multiplying:4=4

4+4=8

4+4+4=12

4+4+4+4=16

4+4+4+4+4=20

4*1=4

4*2=8

4*3=12

4*4=16

4*5=20

exponentiation:4=4

4*4=16

4*4*4=64

4*4*4*4=256

4*4*4*4*4=1024

4^1=4

4^2=16

4^3=64

4^4=256

4^5=1024

..deduction forms

dividing is deduction where one should take into account the beginning of the numbered semi-line (number 0) if there is residue or not

64:8=56 64:8=1..56 8*1+56=64 17:3=14 17:3=1..14 3*1+14=17

64:8-8=48 64:8=2..48 8*2+48=64 17:3-3=11 17:3=2..11 3*2+11=17

64:8-8-8=40 64:8=3..40 8*3+40=64 17:3-3-3=8 17:3=3..8 3*3+8=17

64:8-8-8-8=32 64:8=4..32 8*4+32=64 17:3-3-3-3=5 17:3=4..5 3*4+5=17

64:8-8-8-8-8=24 64:8=5..24 8*5+24=64 17:3-3-3-3-3=2 17:3=5..2 3*5+2=17

64:8-8-8-8-8-8=16 64:8=6..16 8*6+16=64

64:8-8-8-8-8-8-8=8 64:8=7..8 8*7+8=64

64:8-8-8-8-8-8-8-8=0 64:8=8 8*8=64

shorten dividing (instead of number 0, some other number is limiting the division, in this case it is number 24) 64:8=5 delimiter24

8*5+24=64. Dividing is impossible when divider is greater than the dividend,3-5=?,32-54=?, in natural numbers

extraction of a root is multi-dividing with one number in order to get number 1 without residual

81:3=27 4^81=3 1024:4=256

27:3=9 256:4=64

9:3=3 64:4=16

3:3=1 16:4=4 4:4=1 5^1024=4

$\sqrt[4]{81} = 3$ $4^{81} = 3$

shortened extraction of a root 4^83=3..2 (when 0 is not a delimiter, in this case it is number 2) DISCOVERY

83:3=27..2

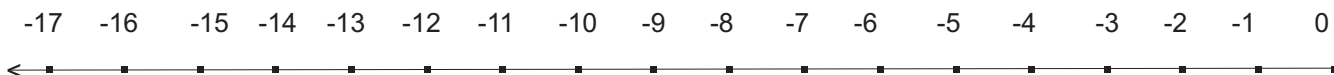
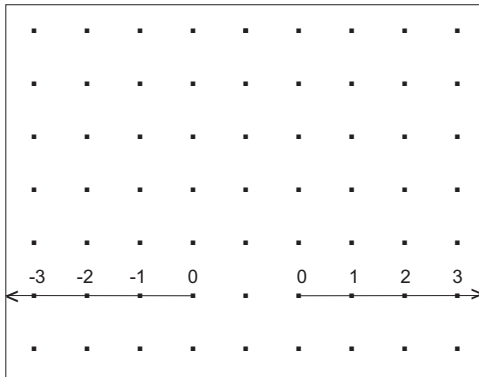
29:3=9..2

11:3=3..2

5:3=1..2

..opposite natural numbers,

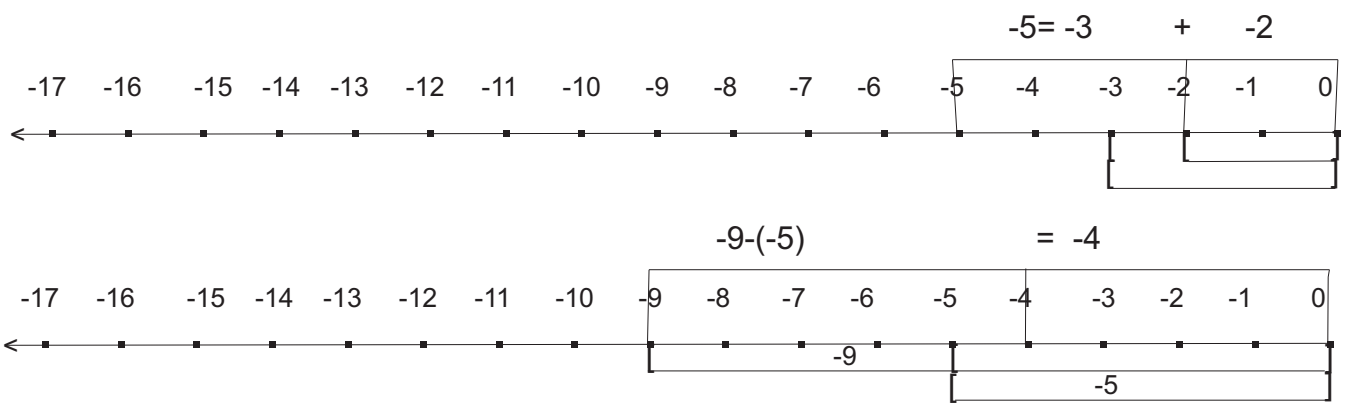
numbered semi-line that is in the same direction as natural numbers but of the opposite sign N(-)=(0,-1,-2,-3,-4,-5,-6,-7,....)



..basic calculation operations in opposite natural number,

addition is when to a number on a numbered semi-line we add another on a numbered semi-line on the left, new-made number is a result -2+(-3)=-5

deduction is when to a number on a numbered semi-line we add another number on a numbered semi-line on the right, new-made number is a result -9-(-5)=-4



..addition forms opposite natural numbers,

multiplying: $-4 = -4$ $-4 * (-1) = -4$
 $-4 + (-4) = -8$ $-4 * (-2) = -8$
 $-4 + (-4) + (-4) = -12$ $-4 * (-3) = -12$
 $-4 + (-4) + (-4) + (-4) = -16$ $-4 * (-4) = -16$
 $-4 + (-4) + (-4) + (-4) + (-4) = -20$ $-4 * (-5) = -20$

exponentiation: $-4 = -4$ $-4^{(-1)} = -4$
 $-4 * (-4) = -16$ $-4^{(-2)} = -16$
 $-4 * (-4) * (-4) = -64$ $-4^{(-3)} = -64$
 $-4 * (-4) * (-4) * (-4) = -256$ $-4^{(-4)} = -256$
 $-4 * (-4) * (-4) * (-4) * (-4) = -1024$ $-4^{(-5)} = -1024$

..deduction forms opposite natural numbers,

dividing is deduction where one should take into account the beginning of the numbered semi-line (number 0) if there is residue or not

$-64 - (-8) = -56$	$-64 : (-8) = -1..-56$	$-8 * (-1) + (-56) = -64$	$-17 - (-3) = -14$	$-17 : (-3) = 1..-14$
$-64 - (-8) - (-8) = -48$	$-64 : (-8) = -2..-48$	$-8 * (-2) + (-48) = -64$	$-17 - (-3) - (-3) = -11$	$-17 : (-3) = 2..-11$
$-64 - (-8) - (-8) - (-8) = -40$	$-64 : (-8) = -3..-40$	$-8 * (-3) + (-40) = -64$	$-17 - (-3) - (-3) - (-3) = -8$	$-17 : (-3) = 3..-8$
$-64 - (-8) - (-8) - (-8) - (-8) = -32$	$-64 : (-8) = -4..-32$	$-8 * (-4) + (-32) = -64$	$-17 - (-3) - (-3) - (-3) - (-3) = -5$	$-17 : (-3) = 4..-5$
$-64 - (-8) - (-8) - (-8) - (-8) - (-8) = -24$	$-64 : (-8) = -5..-24$	$-8 * (-5) + (-24) = -64$	$-17 - (-3) - (-3) - (-3) - (-3) - (-3) = -2$	$-17 : (-3) = 5..-2$
$-64 - (-8) - (-8) - (-8) - (-8) - (-8) - (-8) = -16$	$-64 : (-8) = -6..-16$	$-8 * (-6) + (-16) = -64$		
$-64 - (-8) - (-8) - (-8) - (-8) - (-8) - (-8) - (-8) = -8$	$-64 : (-8) = -7..-8$	$-8 * (-7) + (-8) = -64$		
$-64 - (-8) - (-8) - (-8) - (-8) - (-8) - (-8) - (-8) - (-8) = 0$	$-64 : (-8) = -8$	$-8 * (-8) = -64$		

shorten dividing (instead of number 0, some other number is limiting the division, in this case it is number -24) $-64 : (-8) = -5$ delimiter -24 $-8 * (-5) + (-24) = -64$. Dividing is impossible when divider is greater than the dividend, $-3 - (-5) = ?$, $-32 - (-54) = ?$, in opposite natural numbers

extraction of a root is multi-dividing with one number in order to get number -1 without residual

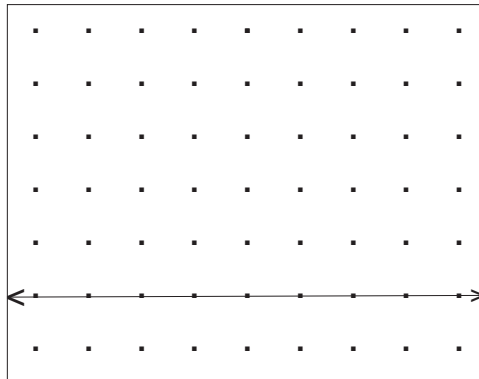
$-81 : (-3) = -27$	$-4^{81} = -3$	$-1024 : (-4) = -256$
$-27 : (-3) = -9$		$-256 : (-4) = -64$
$-9 : (-3) = -3$		$-64 : (-4) = -16$
$-3 : (-3) = -1$		$-16 : (-4) = -4$
		$-4 : (-4) = -1$
		$-5^{1024} = -4$

shortened extraction of a root $-4^{83} = -3..-2$ (when 0 is not a delimiter, in this case it is number 2)

$-83 : (-3) = -27..-2$
 $-29 : (-3) = -9..-2$
 $-11 : (-3) = -3..-2$
 $-5 : (-3) = -1..-2$

..line,

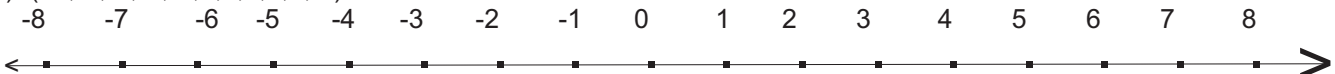
line is a result of joining together two semi-lines of the same direction but of the opposite ends in the starting vertex point.



..numbered line,

joining together numbered semi-line (natural numbers) and numbered semi-line (opposite natural numbers) as a result gives numbered line of the integer natural numbers (after real there are integer numbers (dynamic integer, imaginary integer, super imaginary integer)).

$N(-,+)=(\dots,-4,-3,-2,-1,0,1,2,3,4,\dots)$



..calculation operations in integer natural numbers,
 calculation operations of the same sign are same like in natural numbers or in opposite natural numbers. For the calculation operations of the opposite sign there are two solutions and we are going to use natural rule (because it is older).

addition	$-4+7=3$	$7+(-4)=11$	
deduction	$-4-7=-11$	$7-(-4)=3$	
multiplying	$-4*7=24$	$7*(-4)=28$	
exponentiation	$-4^3=-4*4*4=48$	$4^3=4*4*4=64$	
dividing	$-28:4=7$	$28:(-4)=-7$	delimiter is number 0

extended dividing

$24-6=18$	$24:6=1..18$	$6*1+18=24$
$24-6-6=12$	$24:6=2..12$	$6*2+12=24$
$24-6-6-6=6$	$24:6=3..6$	$6*3+6=24$
$24-6-6-6-6=0$	$24:6=4$	$6*4=24$
$24-6-6-6-6-6=-6$	$24:6=5..-6$	$6*5-6=24$
$24-6-6-6-6-6-6=-12$	$24:6=6..-12$	$6*6-12=24$
$24-6-6-6-6-6-6-6=-18$	$24:6=7..-18$	$6*7-18=24$

DISCOVERY

$0:5=1..-5$	$5*1-(-5)=0$
$0:5=2..-10$	$5*2-(-10)=0$
$0:5=3..-15$	$5*3-(-15)=0$

extended extracting of the roor

$-4^1=-4$	$2^{12}=-4$	$-6^1=-6$	$2^{30}=-6$
$-4^2=-4*4=12$	$3^{48}=-4$	$-6^2=-6*6=30$	$3^{180}=-6$
$-4^3=-4*4*4=48$	$4^{192}=-4$	$-6^3=-6*6*6=180$	$4^{1080}=-6$
$-4^4=-4*4*4*4=192$		$-6^4=-6*6*6*6=1080$	

DISCOVERY