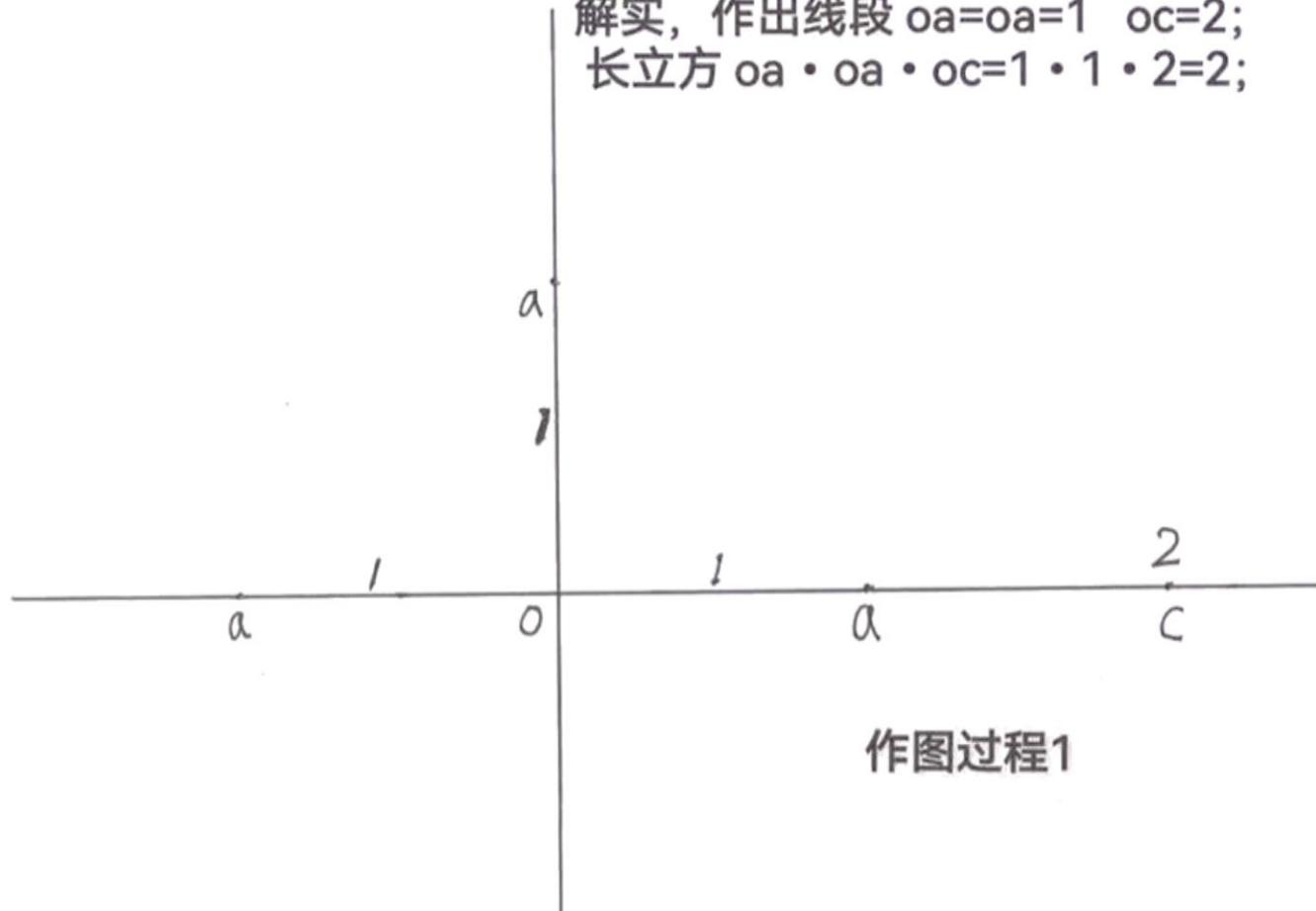


# 崔榮琰《作N倍立方定律》 (角三分定位法)

已知，正立方 边长为1单位长；  
求作，体积为 2 正立方；  
解实，作出线段  $oa=oa=1$   $oc=2$ ；  
长立方  $oa \cdot oa \cdot oc=1 \cdot 1 \cdot 2=2$ ；



作图过程1

## Cui Rongyan's law of making n-times cube

It is known that the side length of the positive cube is 1 unit length; The volume is 2 cubic;

Solve the real, and make the line segment  $OA = OA = 1$

and  $OC = 2$ ; Long cubic  $OA \cdot OA \cdot OC = 1 \cdot 1 \cdot 2 = 2$ ;

1.  $OA \cdot OC = OH \cdot OH$ ;

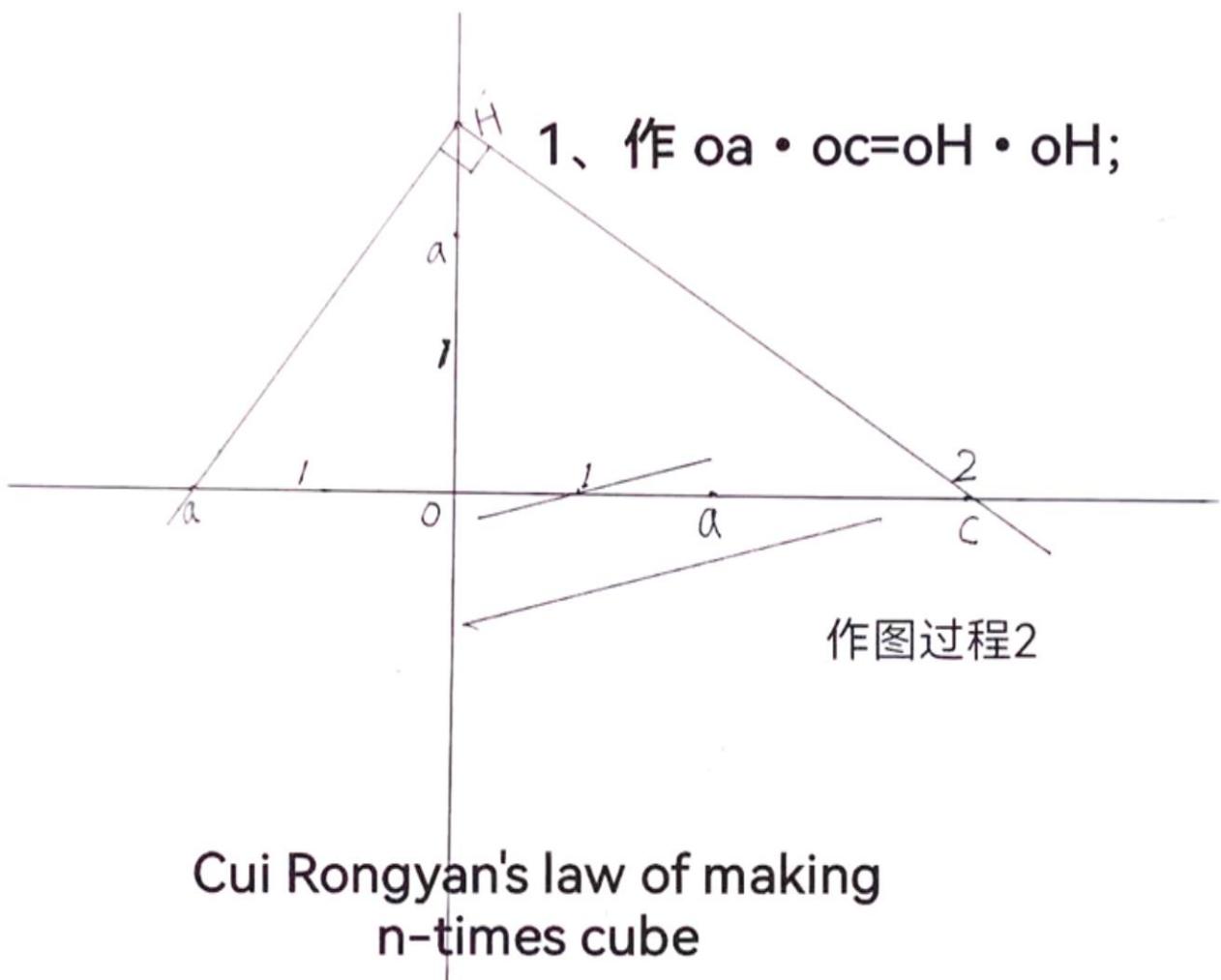
2.  $C_1$  is obtained by dividing the angle  $AHC$  into three parts;

3. Connect  $HC_1$ , and make the vertical line of  $HC_1$  through  $h$  to get  $A_1$ ;  $oa_1 \cdot oc_1 = OH \cdot OH$ ;

Because  $OA \cdot OC = OC_1 \cdot OA_1 = OH \cdot OH$ ;  $oa \cdot oa \cdot oc = (oa \cdot oc) \cdot oa_1$ ;  $oa \cdot oc_1 = oa_1 \cdot oa_1$ ;

So  $OA \cdot OA \cdot OC = OA_1 \cdot OA_1 \cdot OA_1$  Long cubic = positive cubic (constant volume)

# 崔榮琰《作N倍立方定律》 (角三分定位法)



## Cui Rongyan's law of making n-times cube

It is known that the side length of the positive cube is 1 unit length; The volume is 2 cubic;

Solve the real, and make the line segment OA = OC = 1

and OC = 2; Long cubic  $OA \cdot OA \cdot OC = 1 \cdot 1 \cdot 2 = 2$ ;

1.  $OA \cdot OC = OH \cdot OH$ ;

2. C1 is obtained by dividing the angle AHC into three parts;

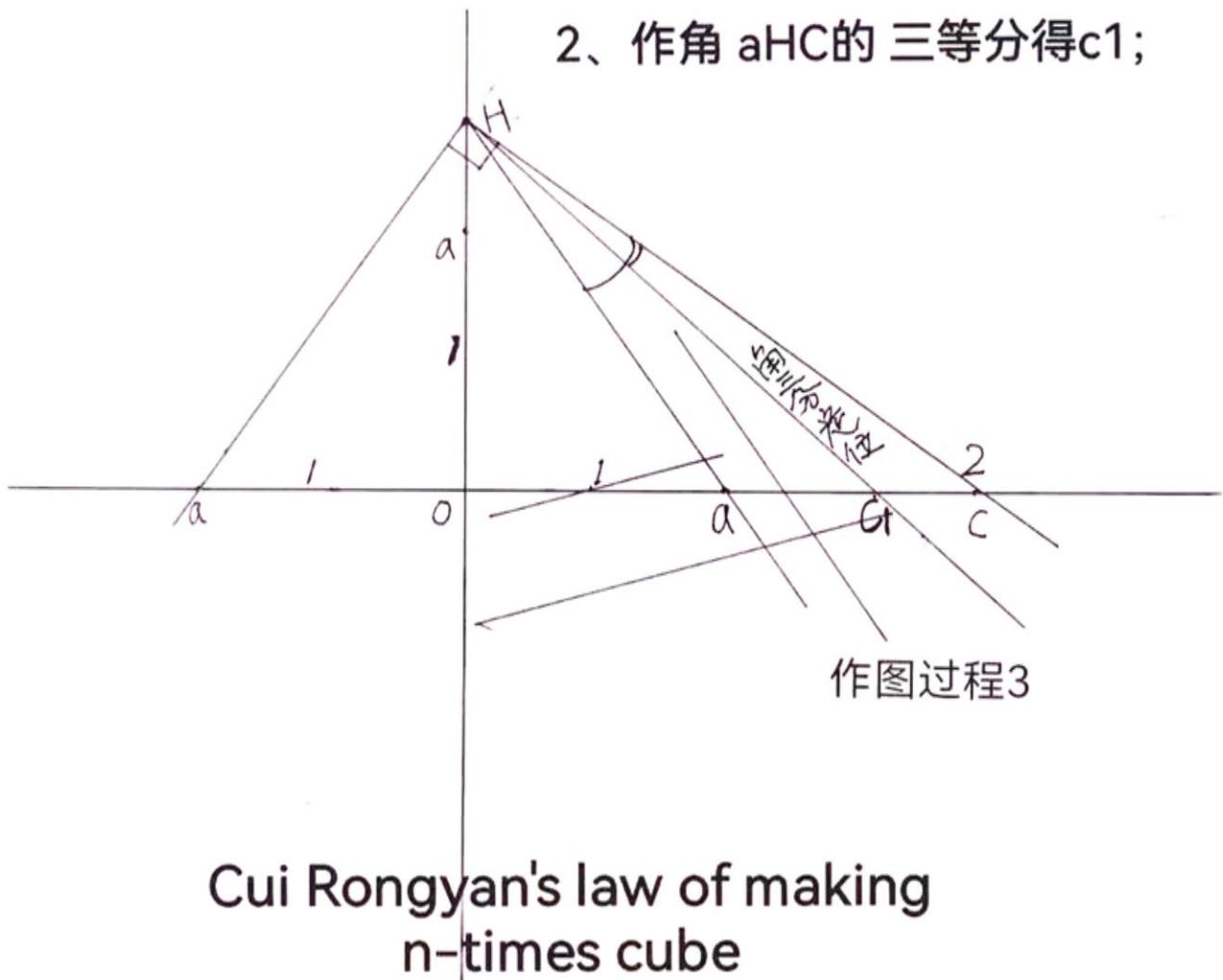
3. Connect HC1, and make the vertical line of HC1 through h to get A1;  $oa_1 \cdot oc_1 = oh \cdot oh$ ;

Because  $OA \cdot OC = OC_1 \cdot OA_1 = OH \cdot OH$ ;  $oa \cdot oa \cdot oc = (oa \cdot oc) \cdot oa_1$ ;  $oa \cdot oc = oa_1 \cdot oa_1$ ;

So  $OA \cdot OA \cdot OC = OA_1 \cdot OA_1 \cdot OA_1$  Long cubic = positive cubic (constant volume)

# 崔榮琰《作N倍立方定律》 (角三分定位法)

2、作角  $aHC$  的三等分得  $c_1$ ;



## Cui Rongyan's law of making n-times cube

It is known that the side length of the positive cube is 1 unit length; The volume is 2 cubic;

Solve the real, and make the line segment  $OA = OA = 1$

and  $OC = 2$ ; Long cubic  $OA \cdot OA \cdot OC = 1 \cdot 1 \cdot 2 = 2$ ;

$$1. OA \cdot OC = OH \cdot OH;$$

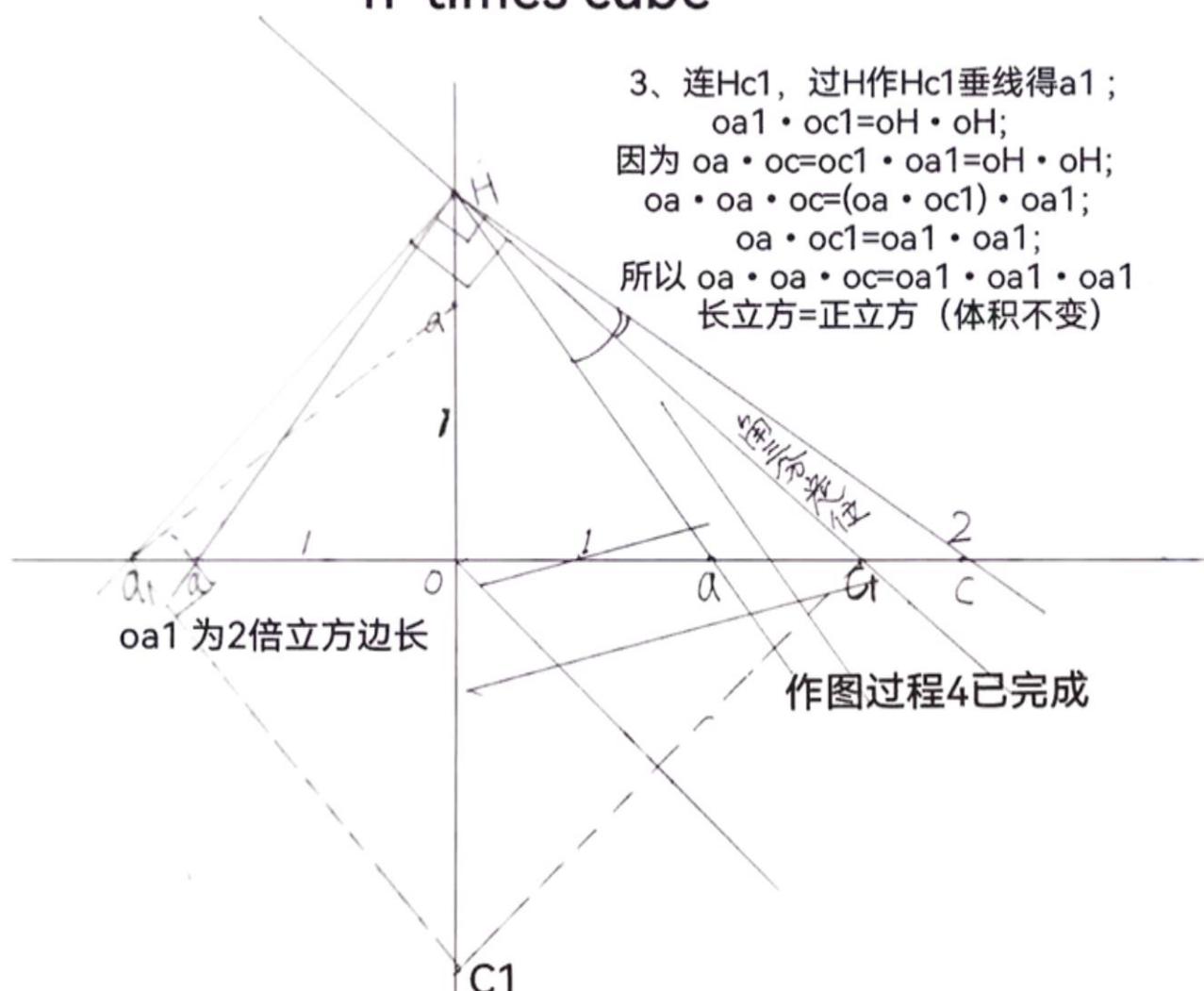
2.  $C_1$  is obtained by dividing the angle  $AHC$  into three parts;

3. Connect  $HC_1$ , and make the vertical line of  $HC_1$  through  $h$  to get  $A_1$ ;  $oa_1 \cdot oc_1 = OH \cdot OH$ ;

Because  $OA \cdot OC = OC_1 \cdot OA_1 = OH \cdot OH$ ;  $oa \cdot oa \cdot oc = (oa \cdot oc) \cdot oa_1$ ;  $oa \cdot oc = oa_1 \cdot oa_1$ ;  
So  $OA \cdot OA \cdot OC = OA_1 \cdot OA_1 \cdot OA_1$  Long cubic = positive cubic (constant volume)

# 崔榮琰《作N倍立方定律》 (角三分定位法)

## Cui Rongyan's law of making n-times cube



It is known that the side length of the positive cube is 1 unit length; The volume is 2 cubic;

Solve the real, and make the line segment  $OA = OA = 1$

and  $OC = 2$ ; Long cubic  $OA \cdot OA \cdot OC = 1 \cdot 1 \cdot 2 = 2$ ;

1.  $OA \cdot OC = OH \cdot OH$ ;

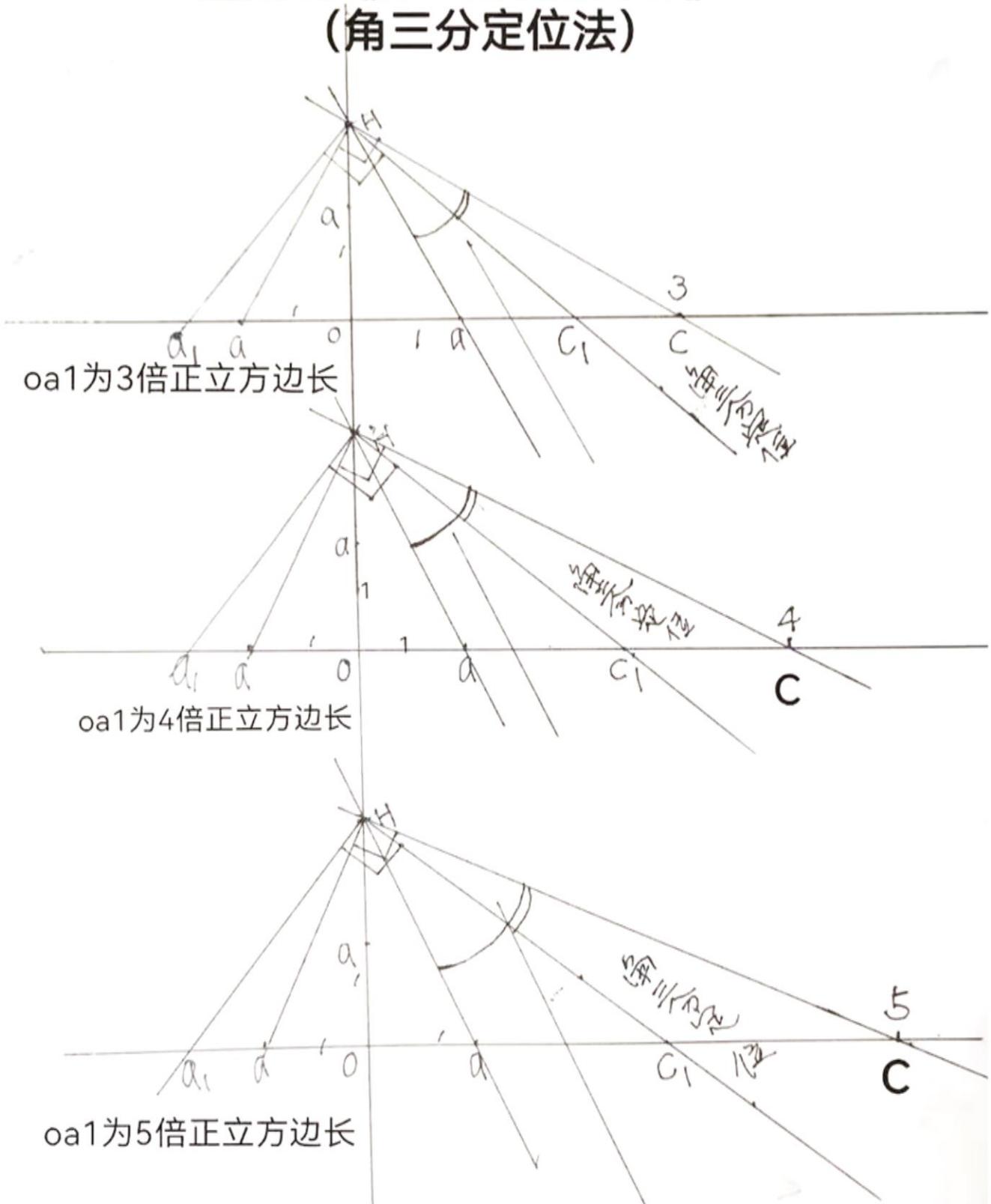
2.  $C_1$  is obtained by dividing the angle  $AHC$  into three parts;

3. Connect  $HC_1$ , and make the vertical line of  $HC_1$  through  $h$  to get  $A_1$ ;  $oa_1 \cdot oc_1 = OH \cdot OH$ ;

Because  $OA \cdot OC = OC_1 \cdot OA_1 = OH \cdot OH$ ;  $oa \cdot oa \cdot oc = (oa \cdot oc_1) \cdot oa_1$ ;  $oa \cdot oc_1 = oa_1 \cdot oa_1$ ;

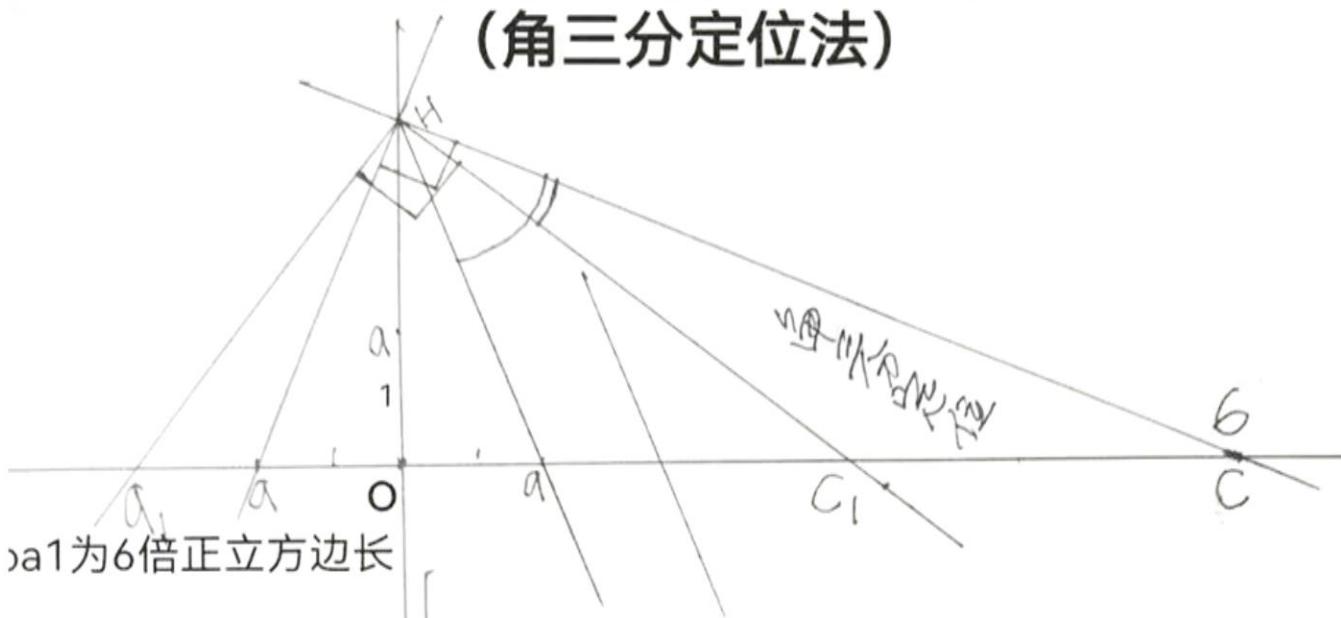
So  $OA \cdot OA \cdot OC = OA_1 \cdot OA_1 \cdot OA_1$  Long cubic = positive cubic (constant volume)

# 崔榮琰《作N倍立方定律》 (角三分定位法)

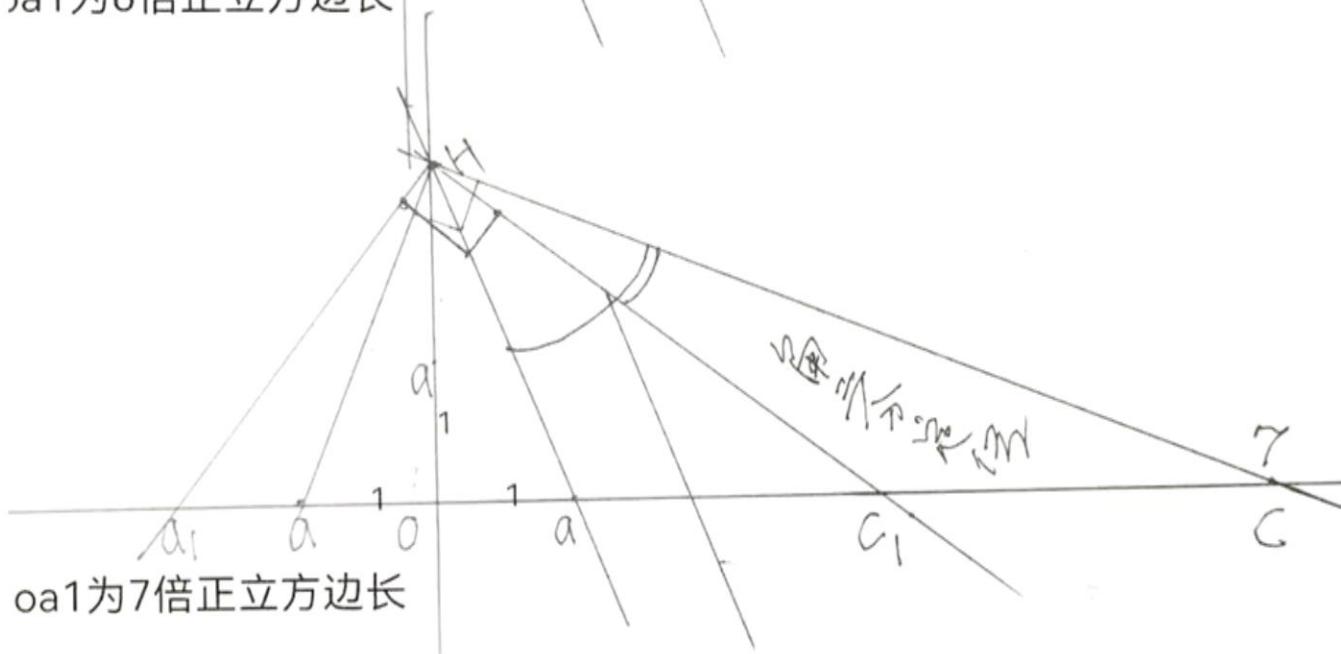


崔榮琰《角N等分定律》是数学王国的金钥匙，  
千古无解难题迎刃而解。N为偶奇质数均有解。

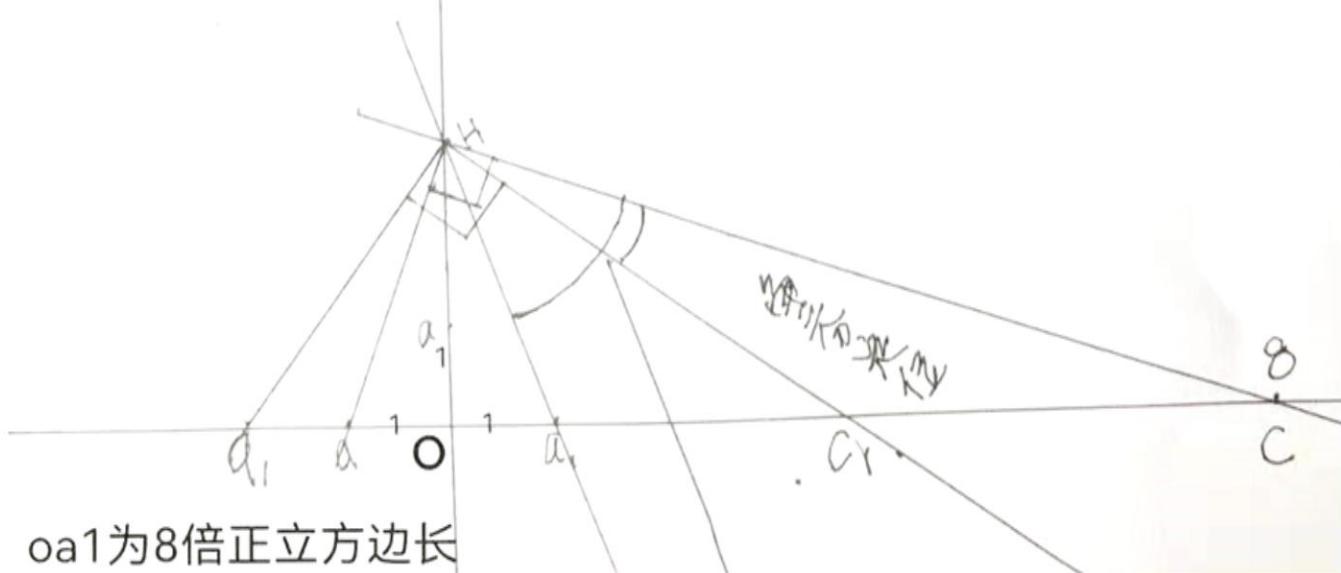
# 崔榮琰《作N倍立方定律》 (角三分定位法)



$oa_1$  为 6 倍正立方边长



$oa_1$  为 7 倍正立方边长



$oa_1$  为 8 倍正立方边长