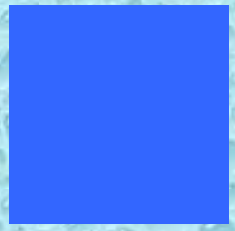
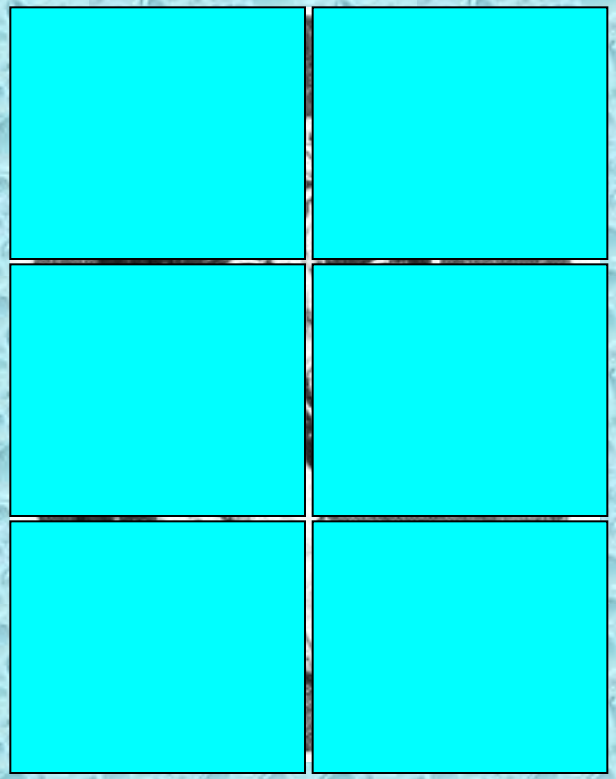
частные случаи сравнения обыкновенных дробей

Гимназия 32 г.Иваново
Учитель математики Иванова А.С.



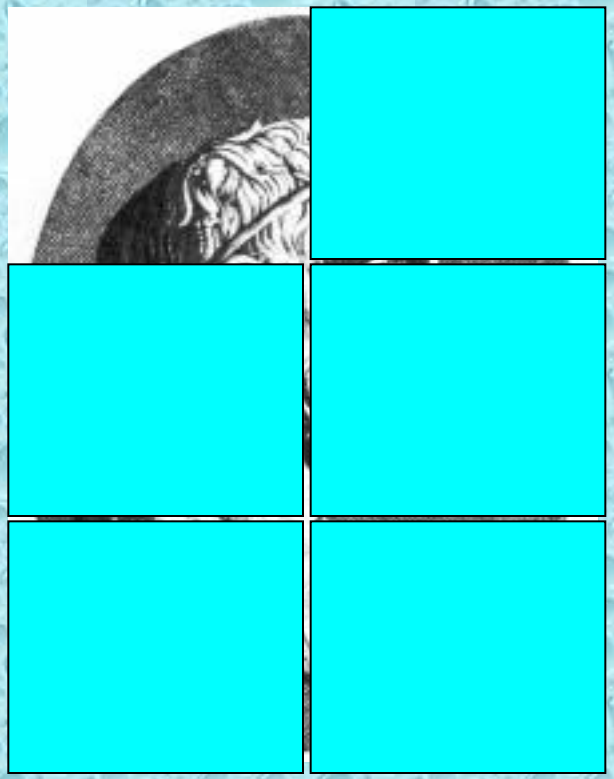
Найдите наименьшее общее кратное следующих чисел, и откройте портрет великого математика.

НОК (15 ; 5) ?



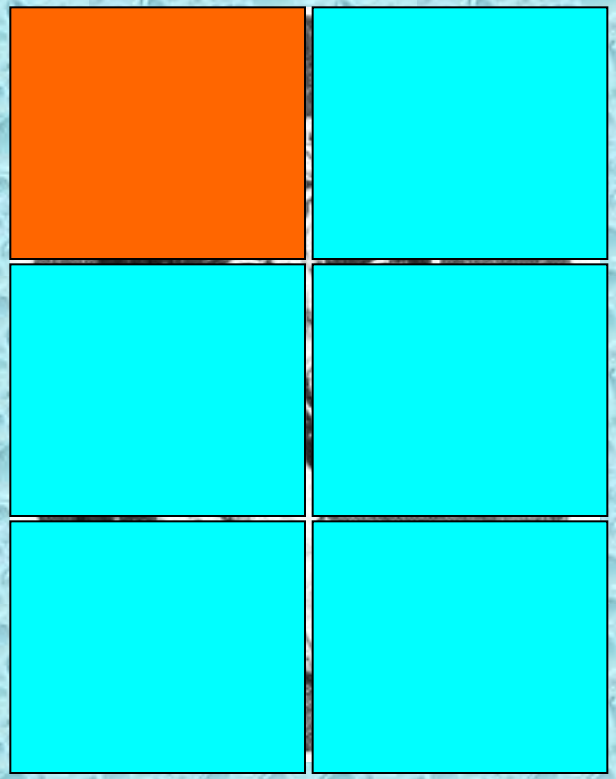
21	5
30	15
35	45
75	1

ПРАВИЛЬНО !!!



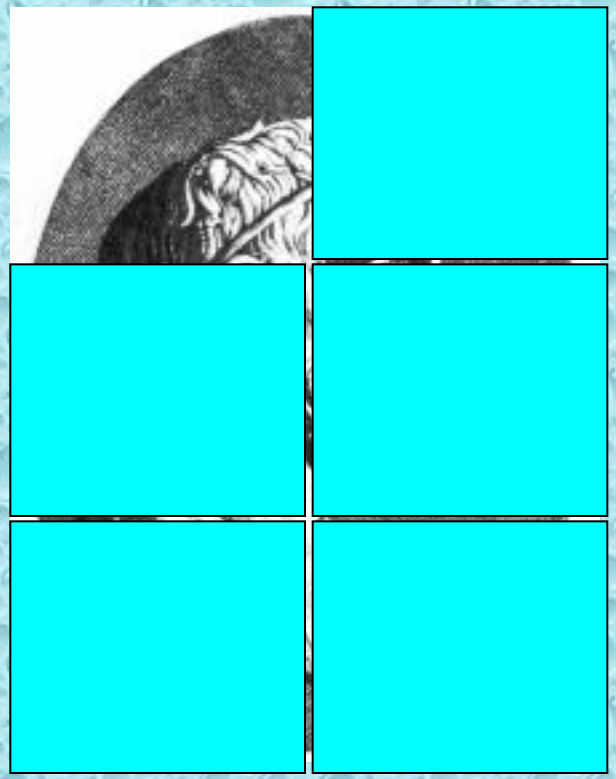
15

НЕВЕРНО !!!



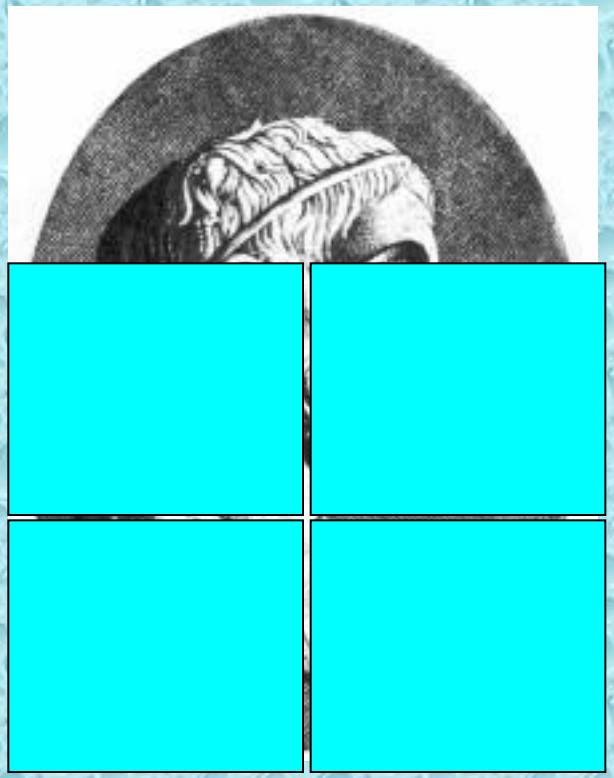
15

НОК (8 ; 9) ?



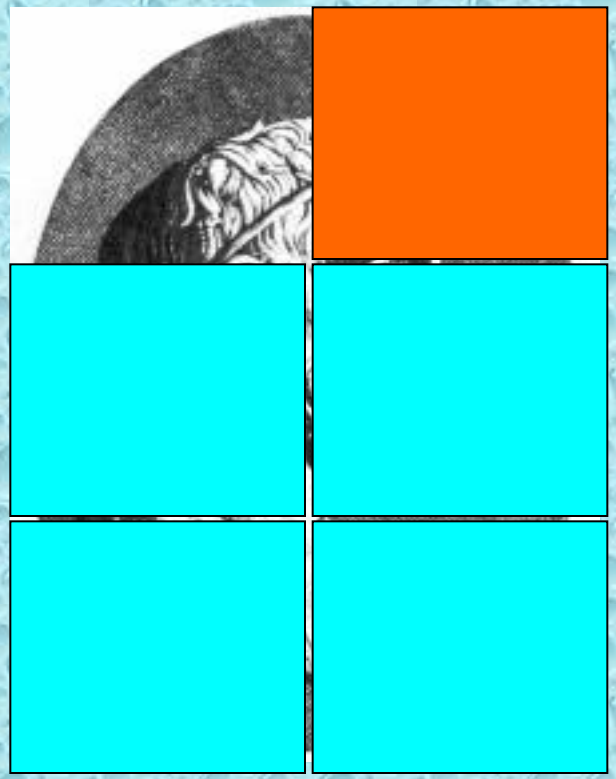
24	9
198	81
8	3
72	116

ВЕРНО !!!



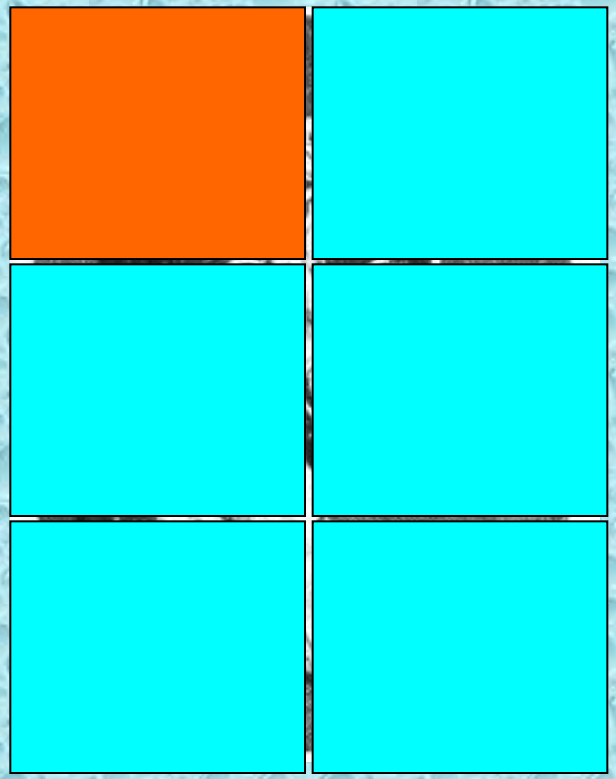
72

НЕТ, НЕПРАВИЛЬНО!



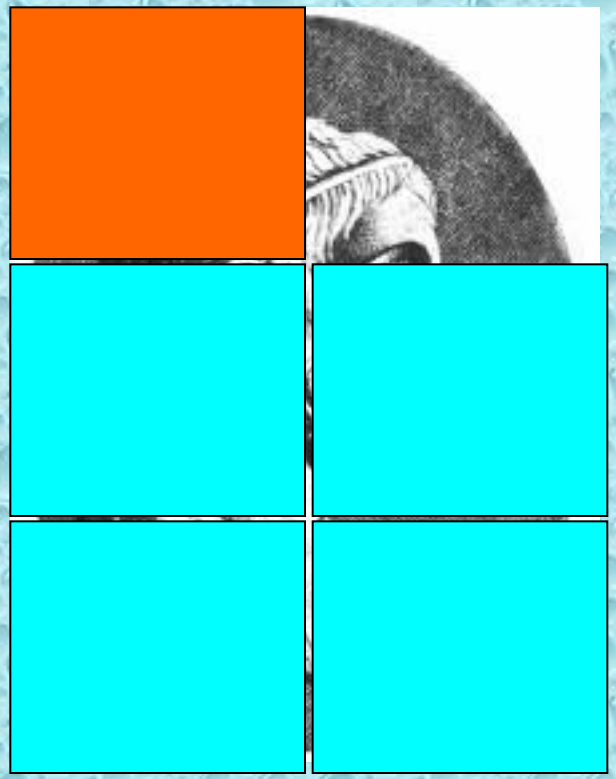
72

НОК (8 ; 9) ??



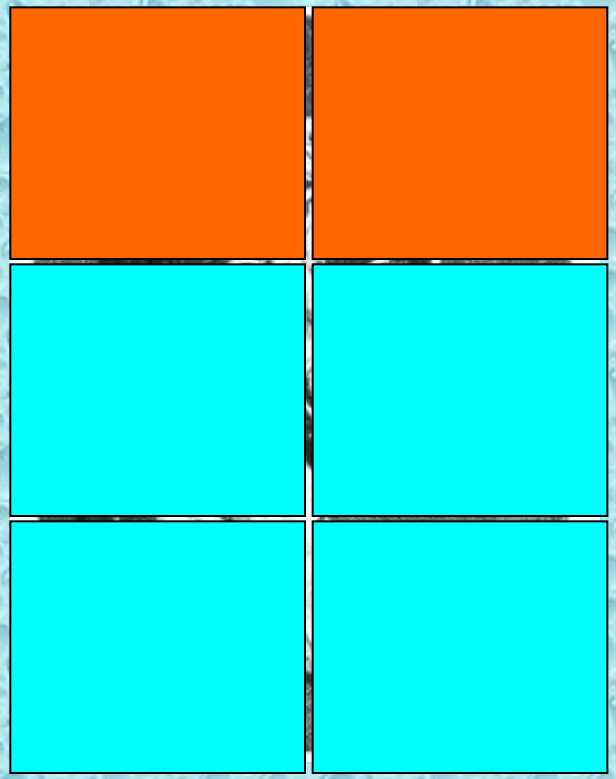
24	9
198	81
8	3
72	116

НА ЭТОТ РАЗ ТОЧНО.



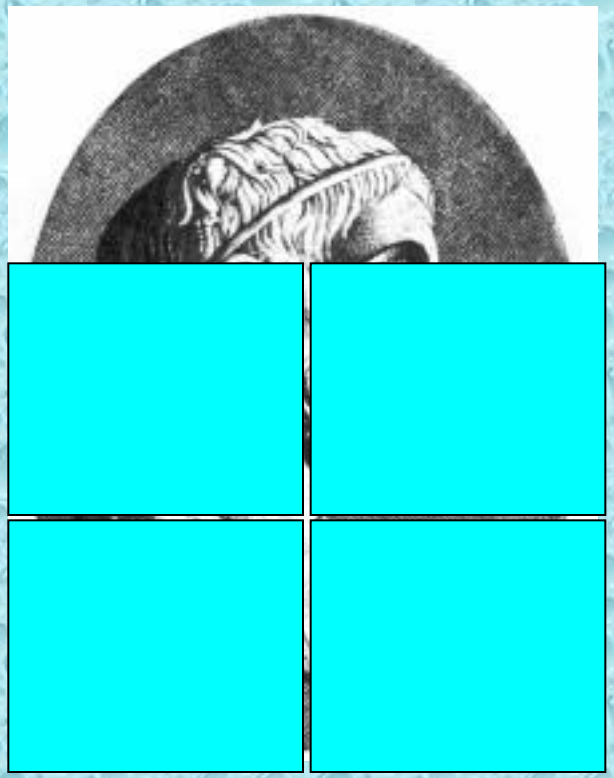
72

И СНОВА – НЕТ!



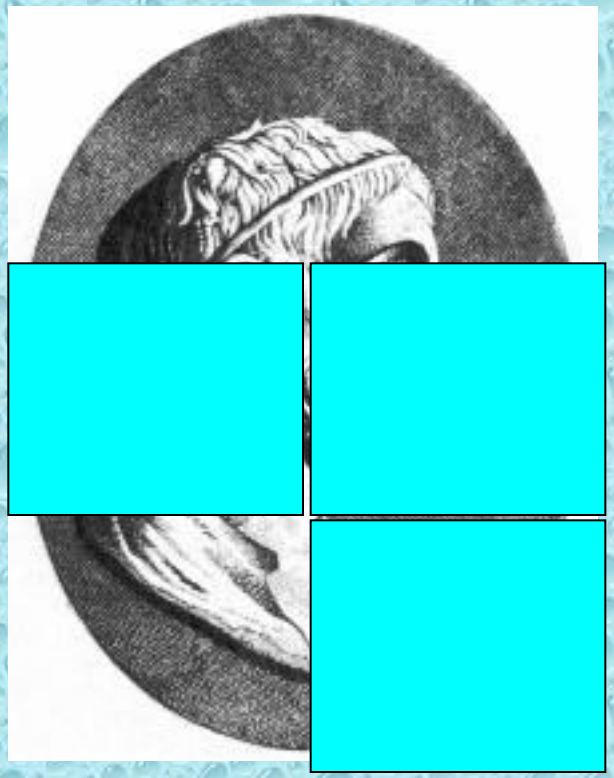
72

НОК (6 ; 12) ?



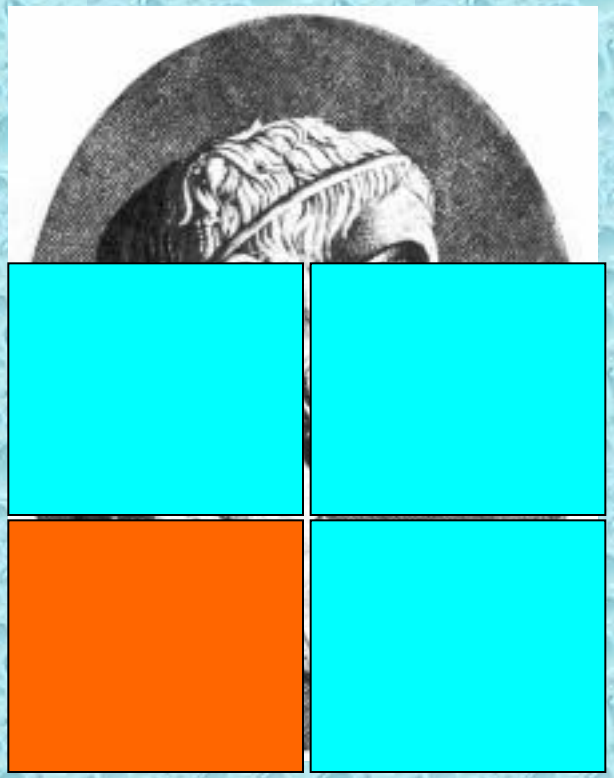
6	24
17	12
33	9
120	36

АБСОЛЮТНО ВЕРНО!!!



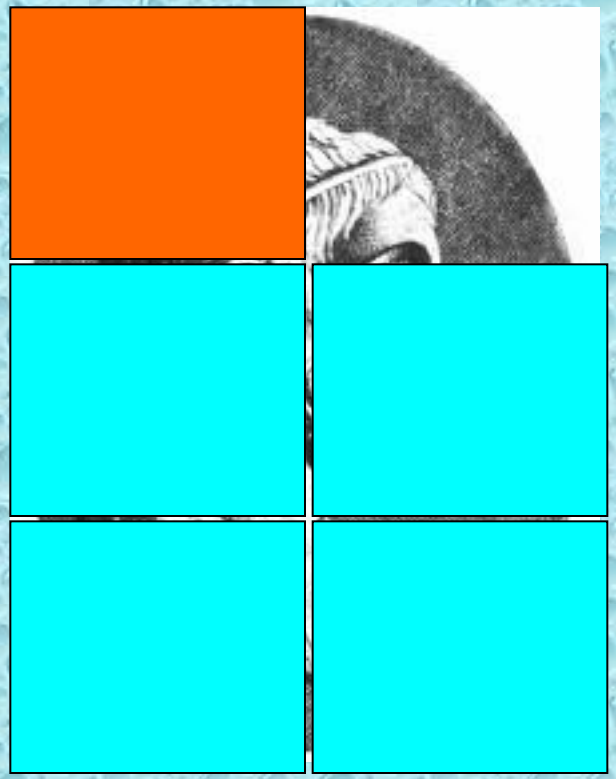
12

ДА НЕТ ЖЕ – 12!



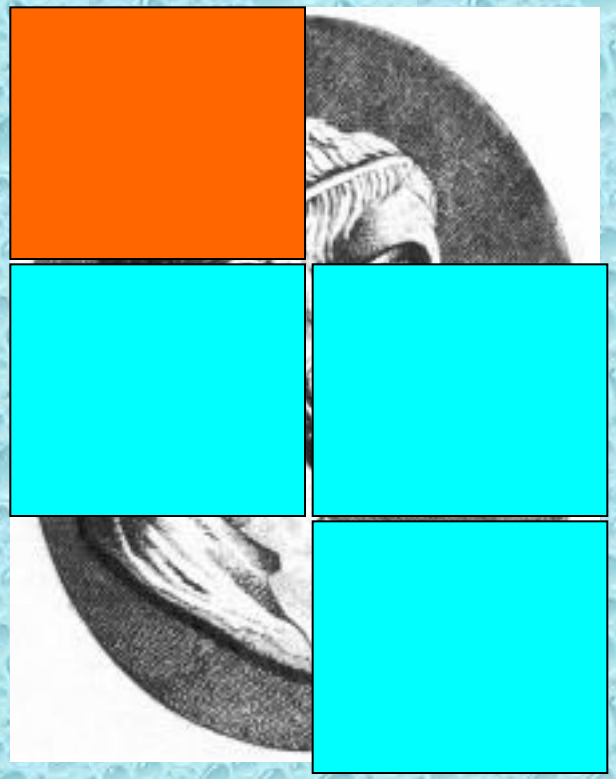
12

НОК (6 ; 12) ??



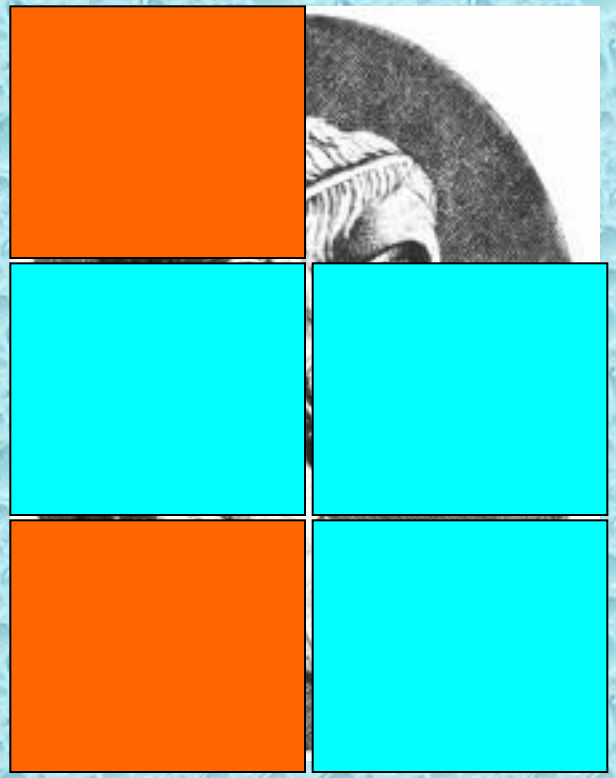
6	24
17	12
33	9
120	36

В ТОЧКУ!



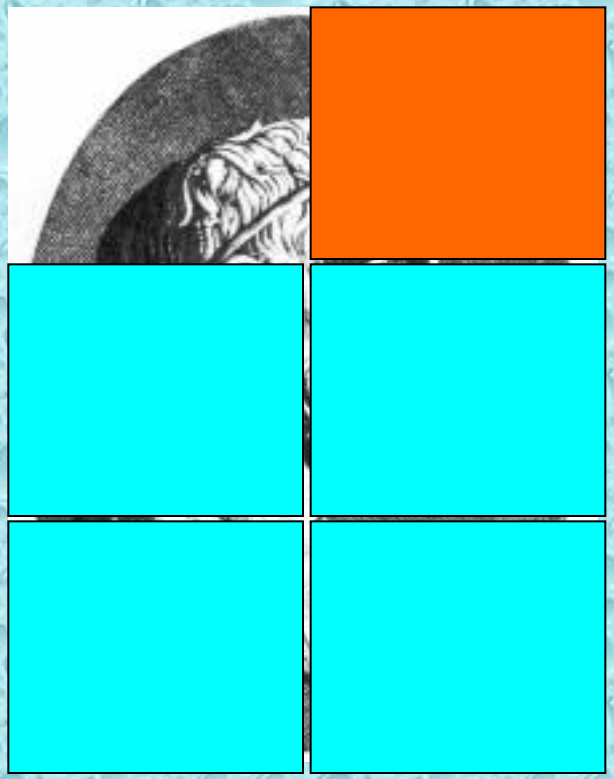
12

ОПЯТЬ ОШИБКА!



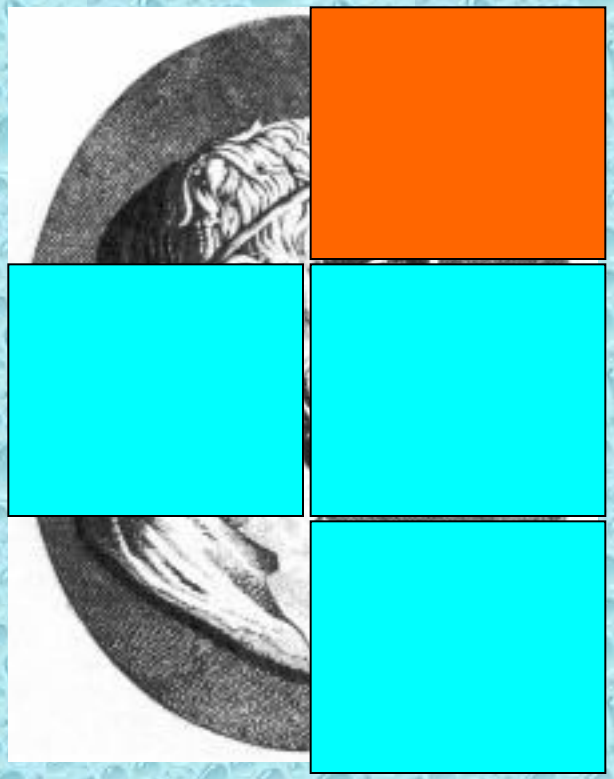
12

НОК (6 ; 12) ???



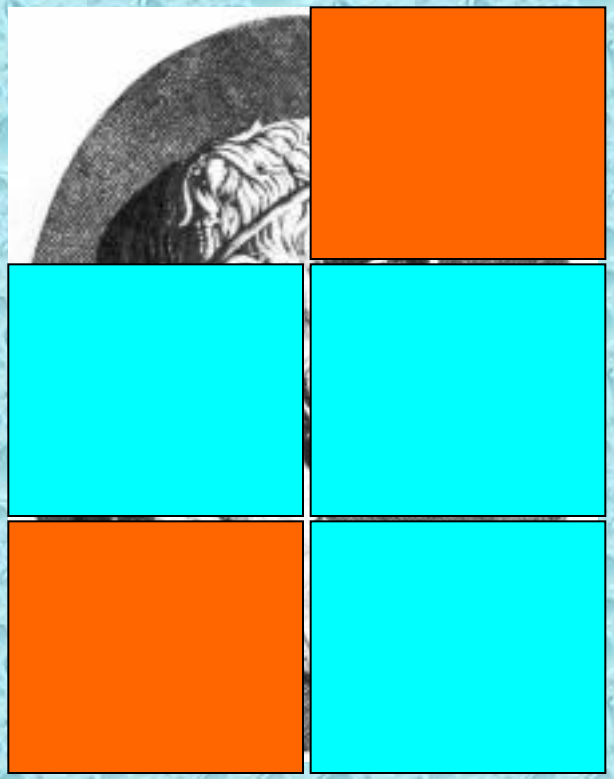
6	24
17	12
33	9
120	36

12!



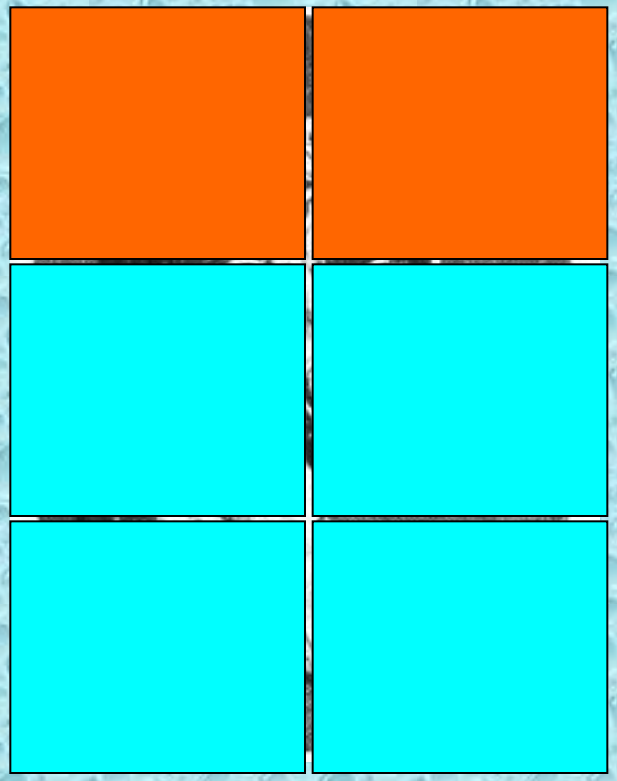
12

ДУМАЙТЕ КАК СЛЕДУЕТ!



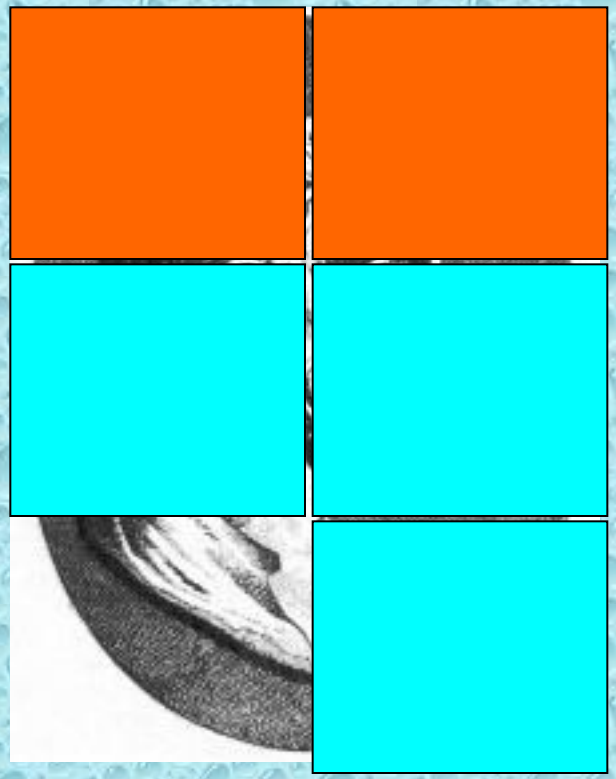
12

НОК (6 ; 12) ????



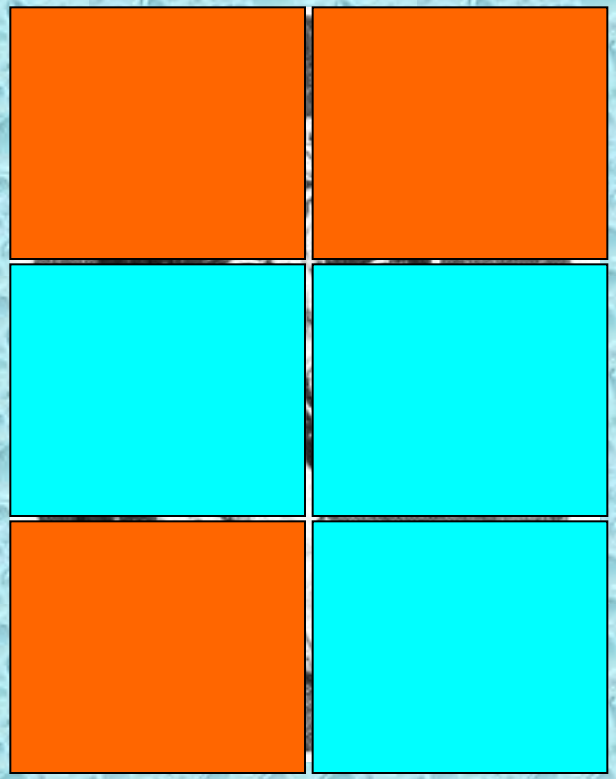
6	24
17	12
33	9
120	36

НАКОНЕЦ-ТО!



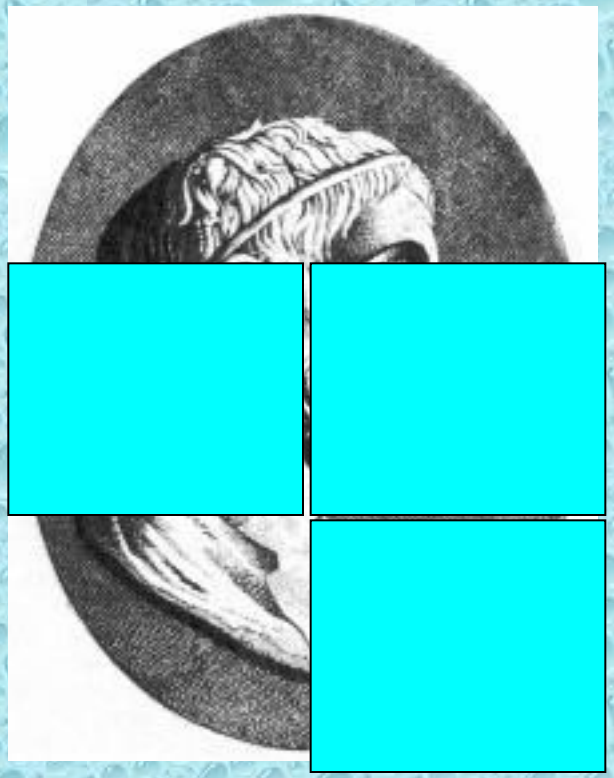
12

ДА ЧТО С ВАМИ?



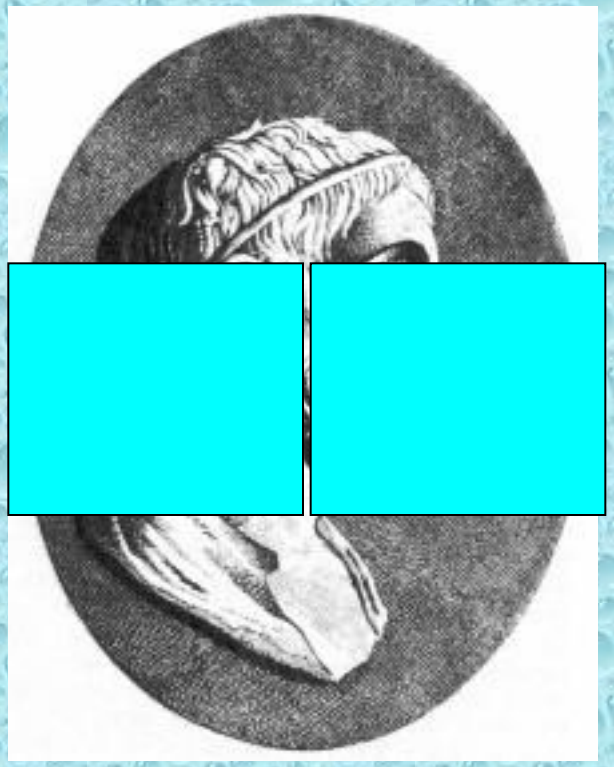
12

НОК (12 ; 15) ?



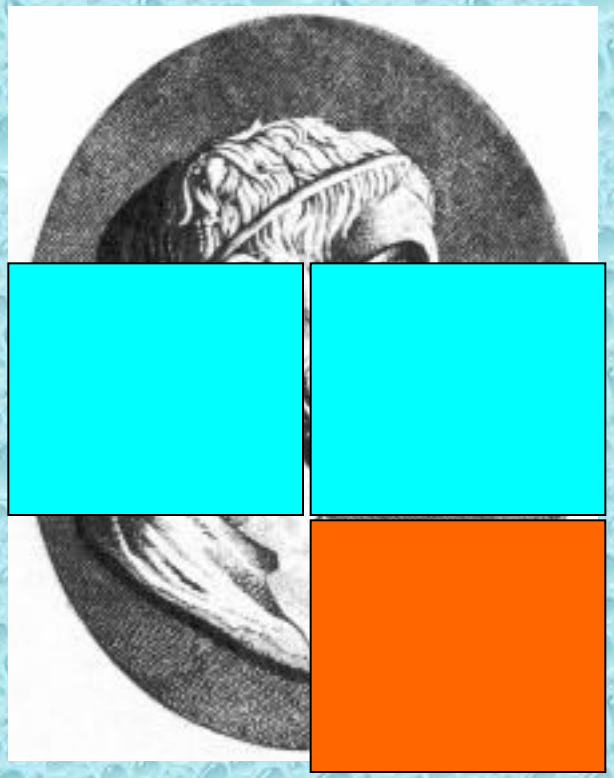
3	24
1215	32
15	12
125	60

СКОРО ОТКРОЕТЕ ПОРТРЕТ!



60

БЫВАЕТ!



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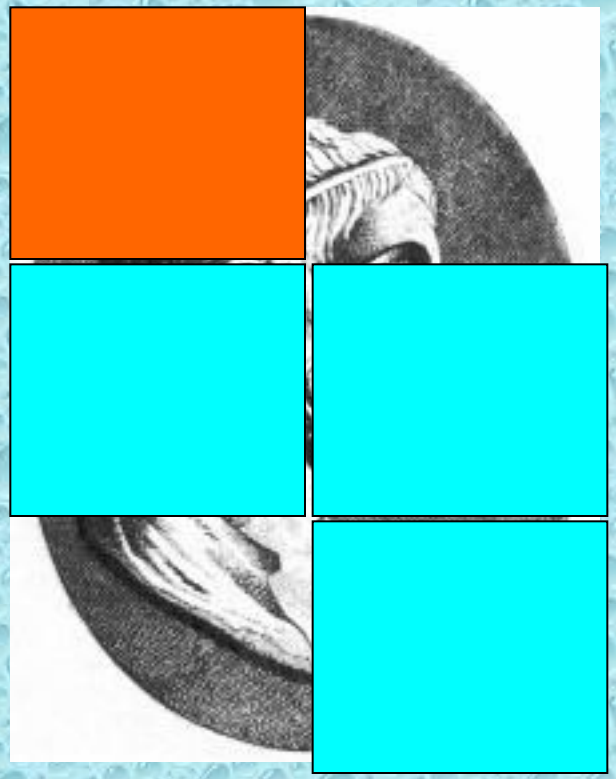
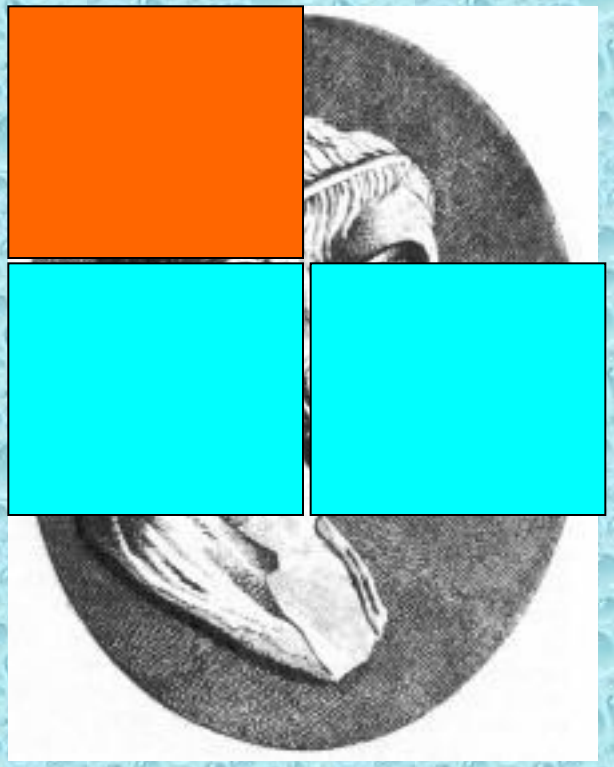
НОК (12 ; 15) ??



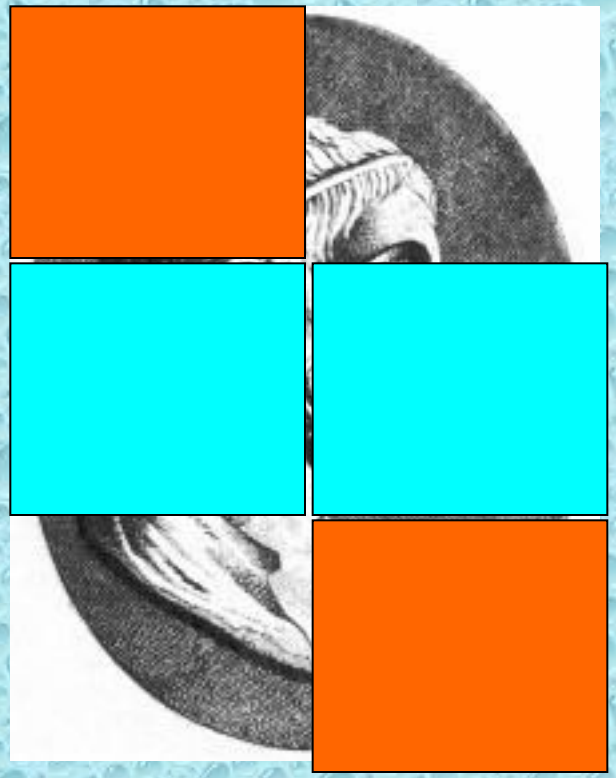
3	24
1215	32
15	12
125	60

НЕПЛОХО СЧИТАЕТЕ!



60

НУ ВОТ, ОПЯТЬ!



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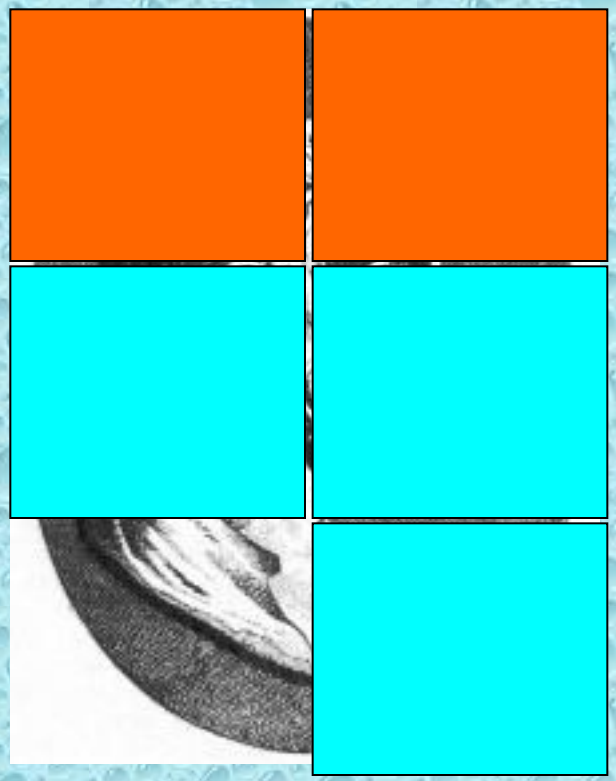
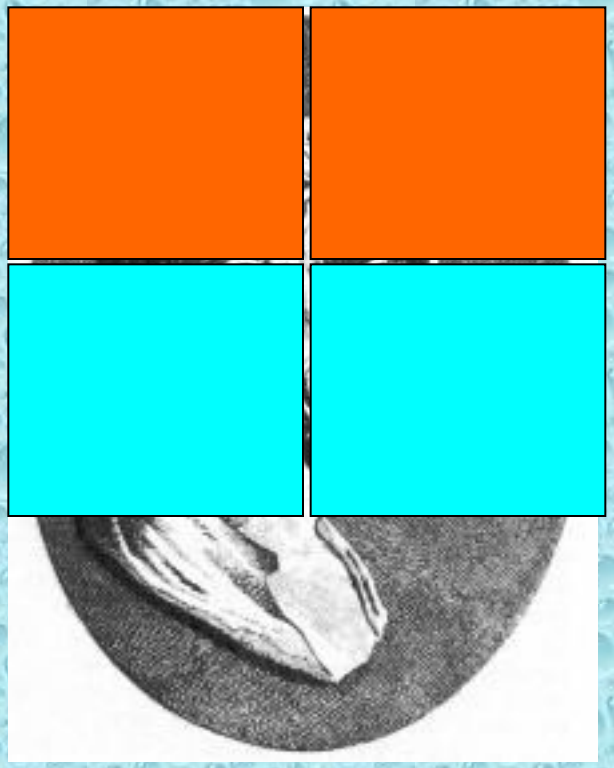
НОК (12 ; 15) ???



3	24
1215	32
15	12
125	60

ЧТО-ТО МЫ УВИДИМ!



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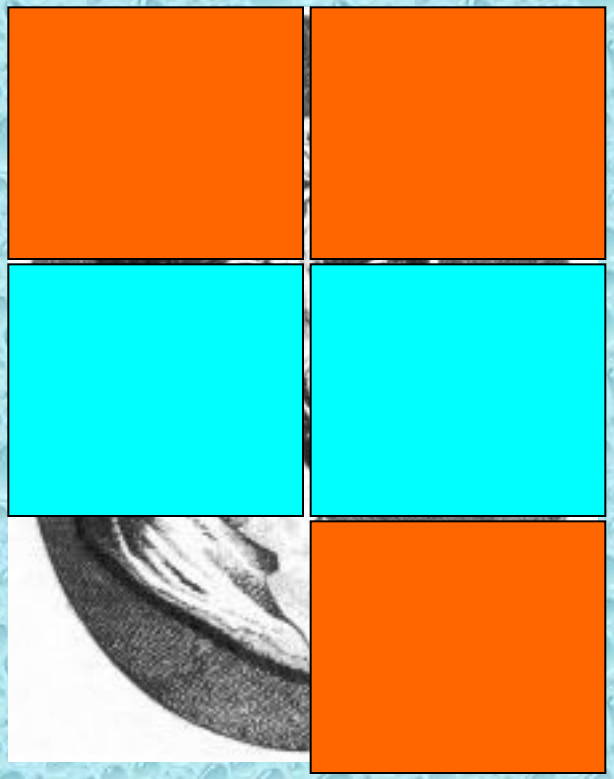
БЕЗ КОММЕНТАРИЕВ!



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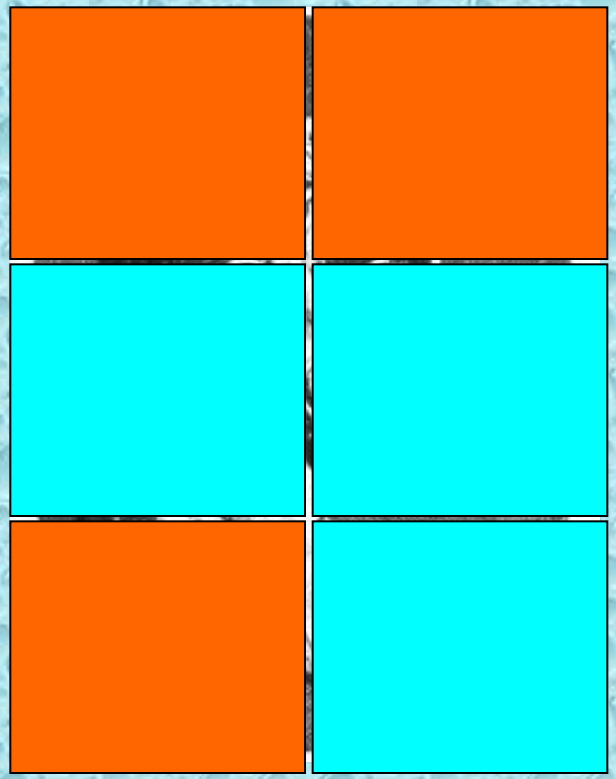
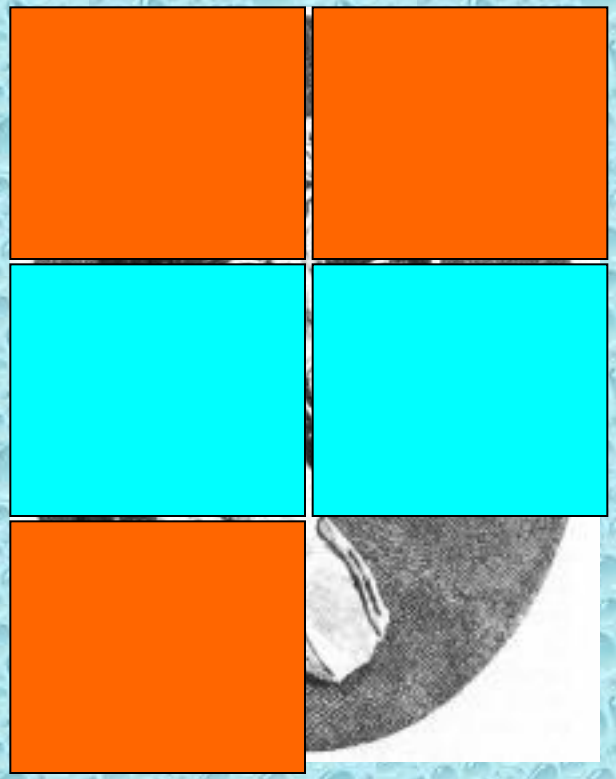
НОК (12 ; 15) ????



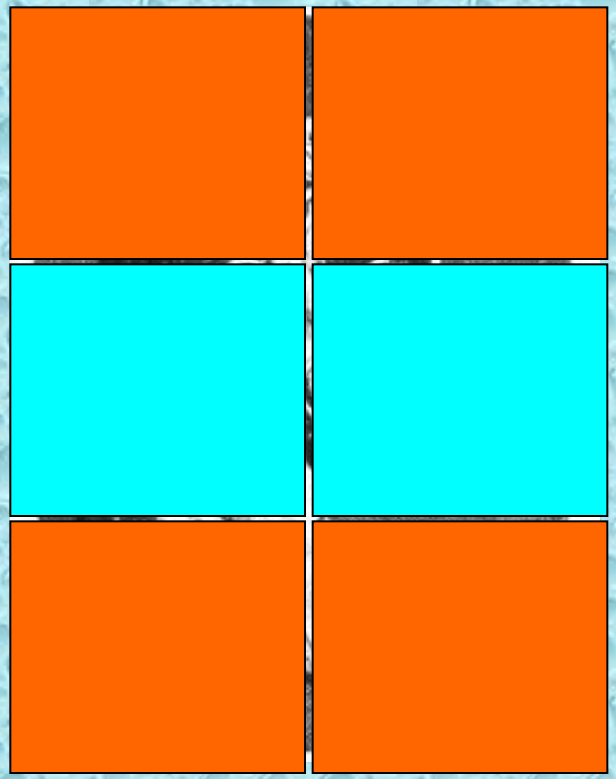
3	24
1215	32
15	12
125	60

УРА, СВЕРШИЛОСЬ!



60

НЕТ, НЕТ И НЕТ!!!



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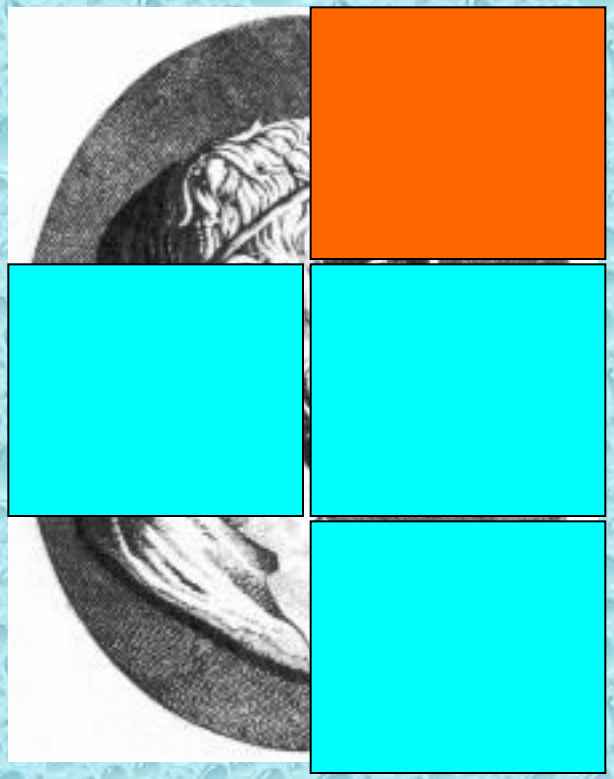
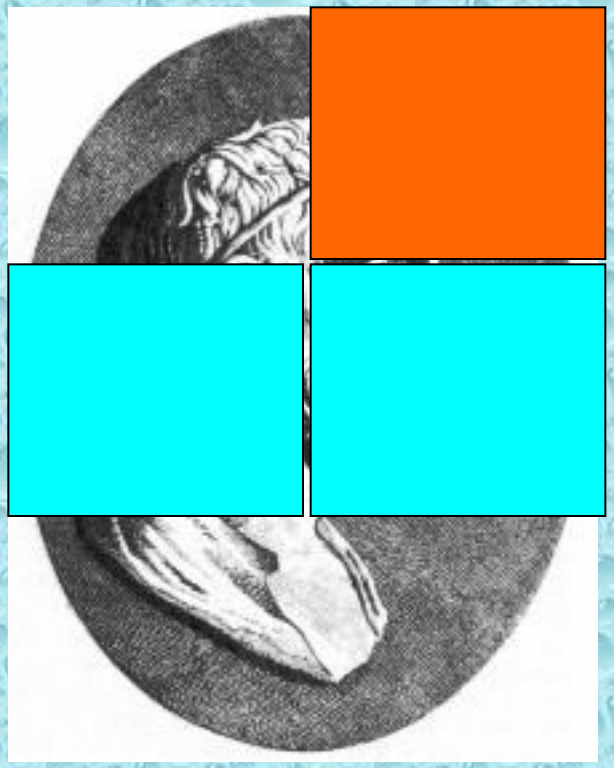
НОК (12 ; 15) ?????



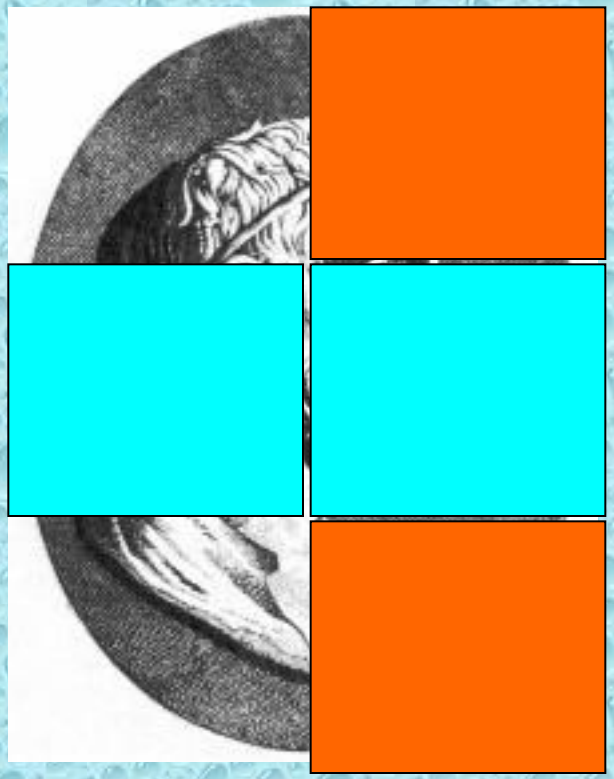
3	24
1215	32
15	12
125	60

И СНОВА ВЕРНО!



60

ОЙ!



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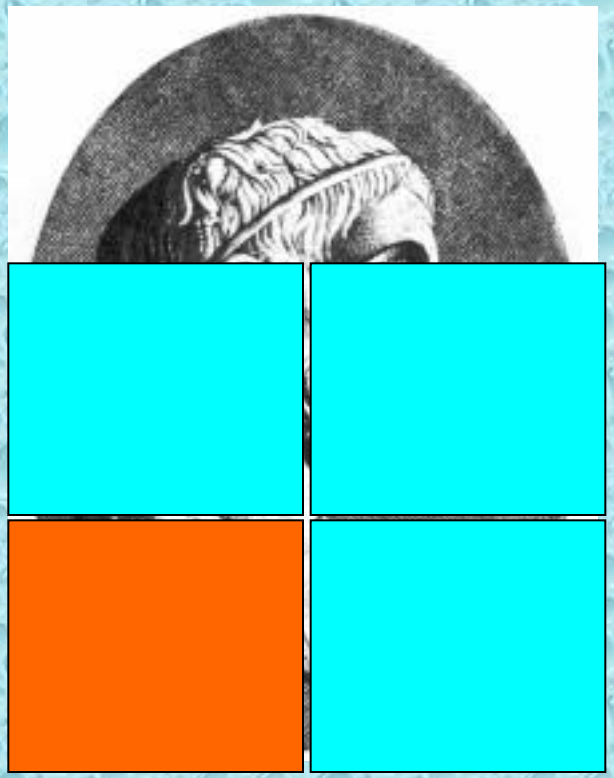
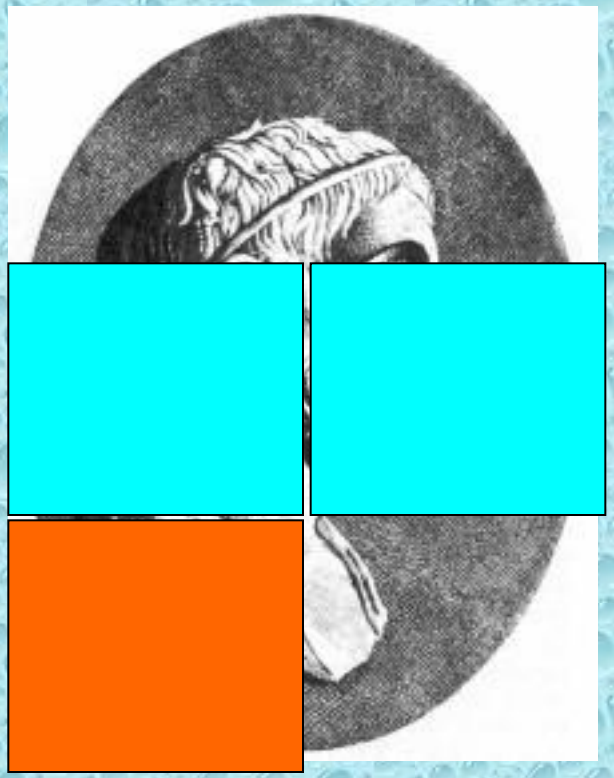
НОК (12 ; 15) ??????



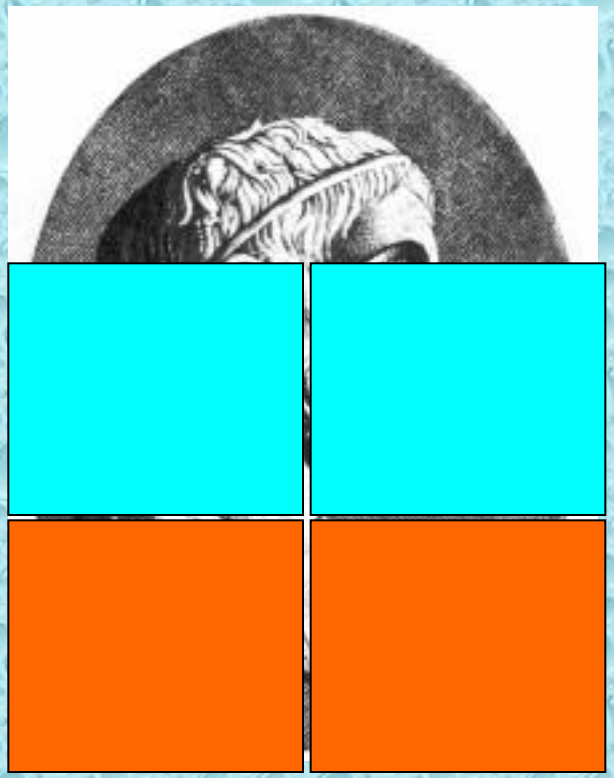
3	24
1215	32
15	12
125	60

ЗАБУДЬТЕ ПРО ОШИБКУ!



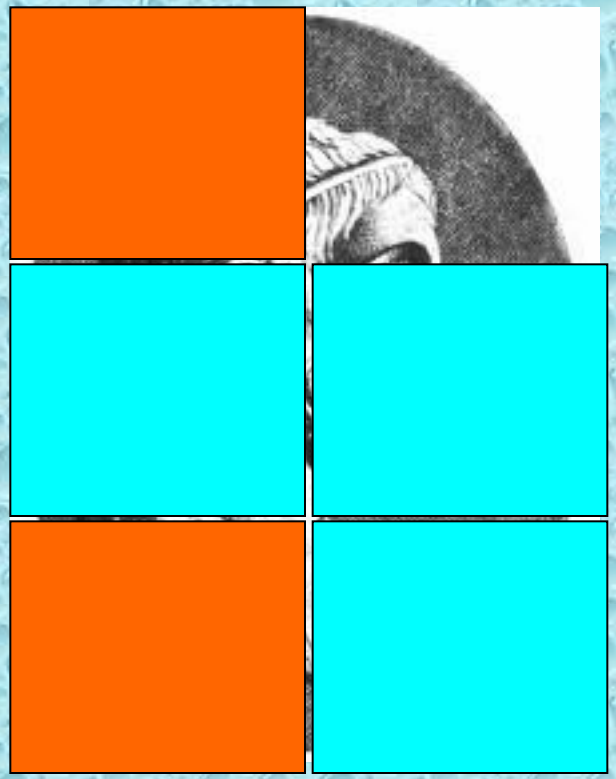
60

ЧЕРНАЯ ПОЛОСА!



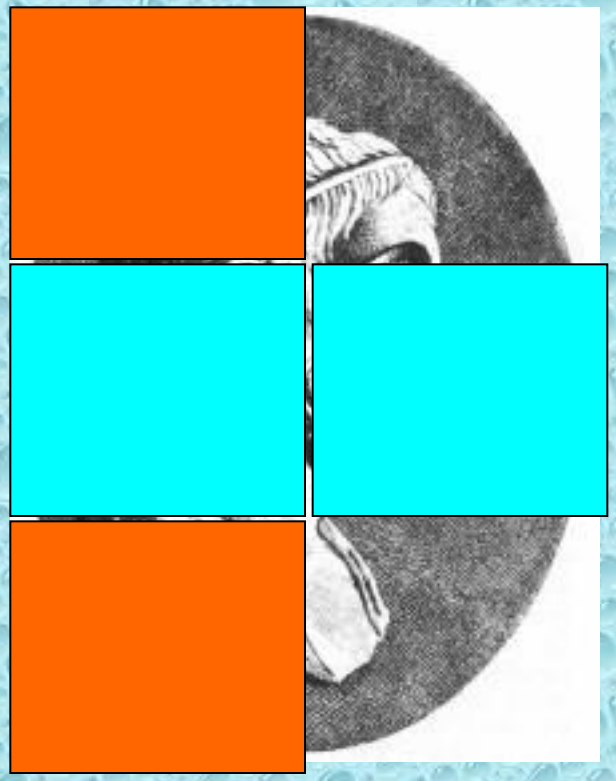
60

НОК (12 ; 15) .



3	24
1215	32
15	12
125	60

МОЖЕМ УВИДЕТЬ ПРОФИЛЬ!



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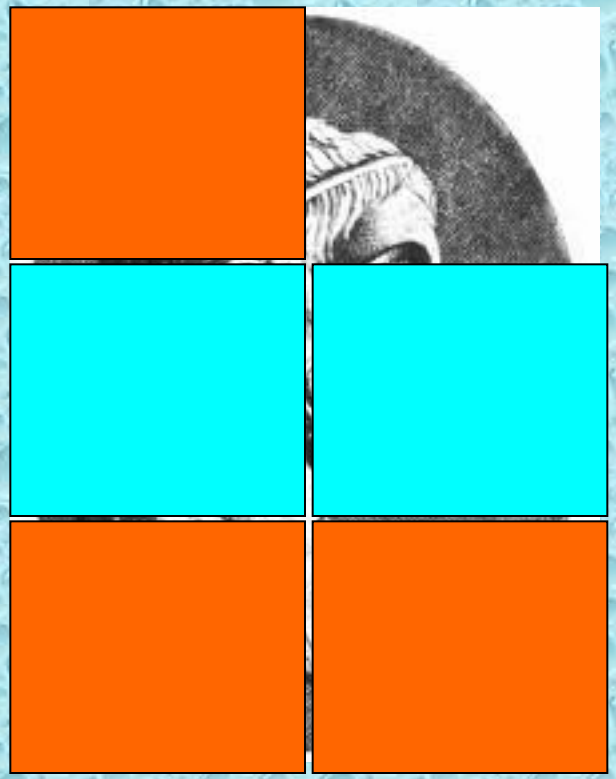
СТАНОВИТСЯ ГРУСТНО!



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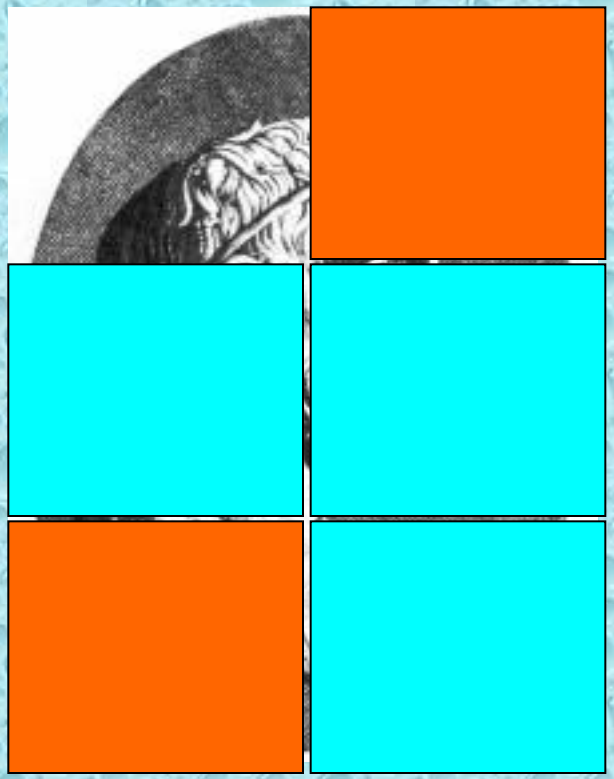
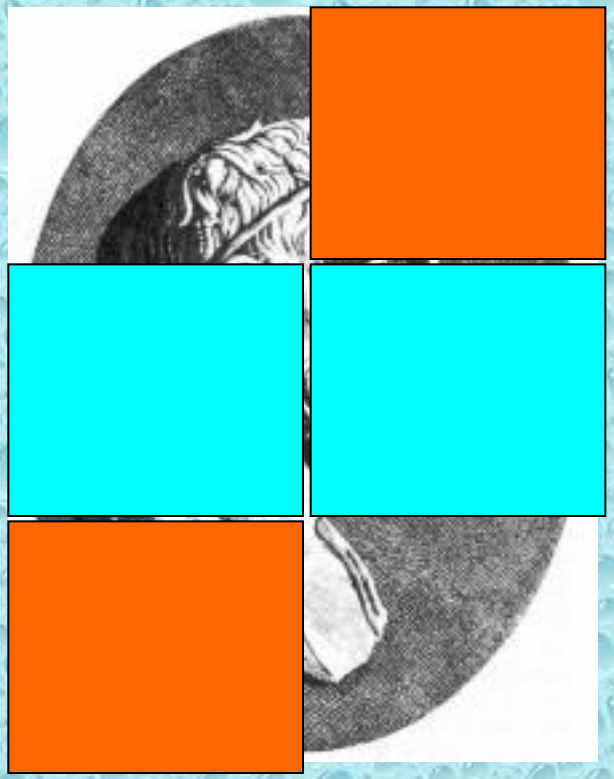
НОК (12 ; 15) …



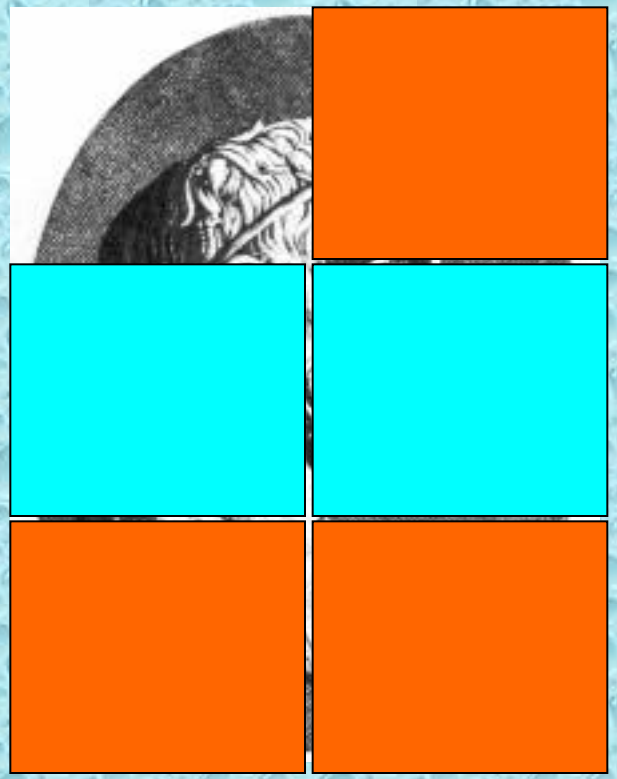
3	24
1215	32
15	12
125	60

ШАНСЫ ЕЩЕ ЕСТЬ!



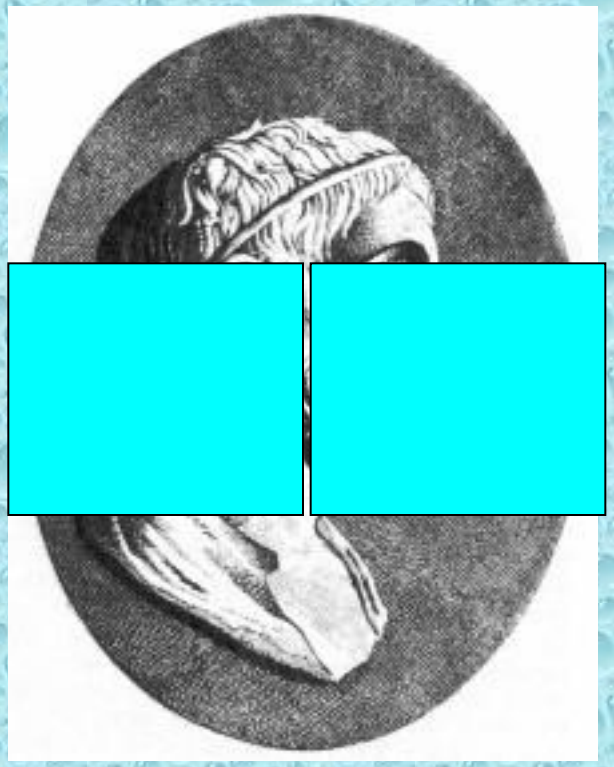
60

ПЛОХО, СОВСЕМ ПЛОХО!



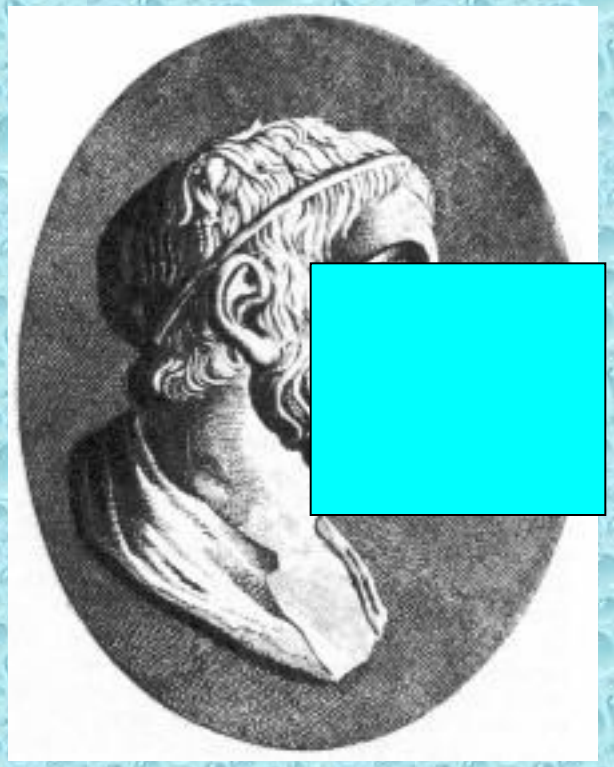
60

НОК (6 ; 4) ?



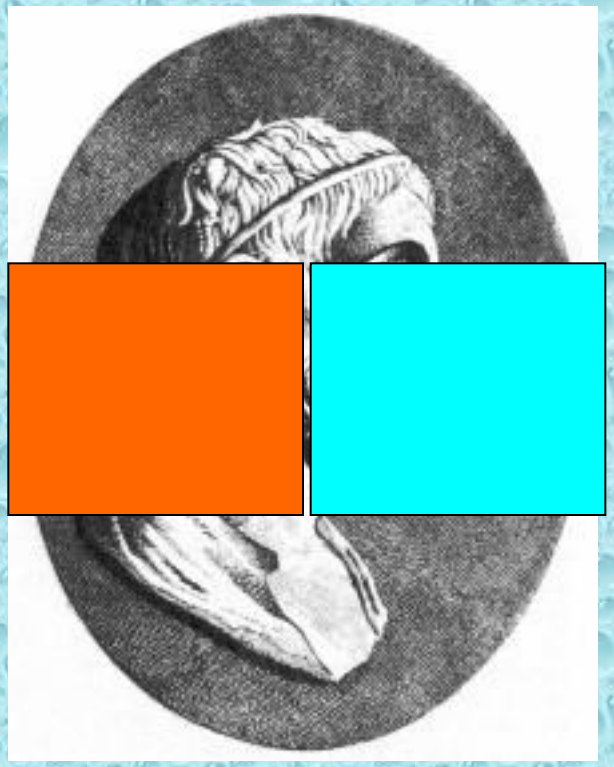
12	24
6	2
3	64
46	67

ЗАМЕЧАТЕЛЬНО!



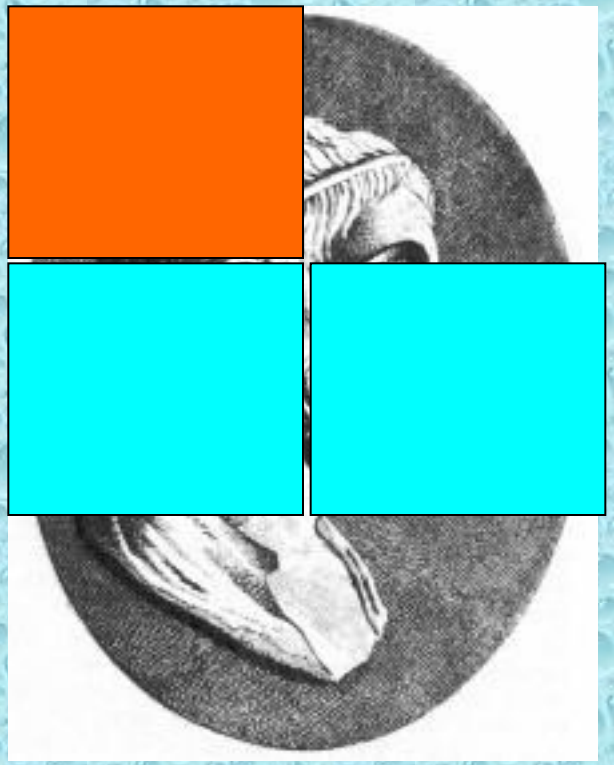
12

НЕОЖИДАННОСТЬ!



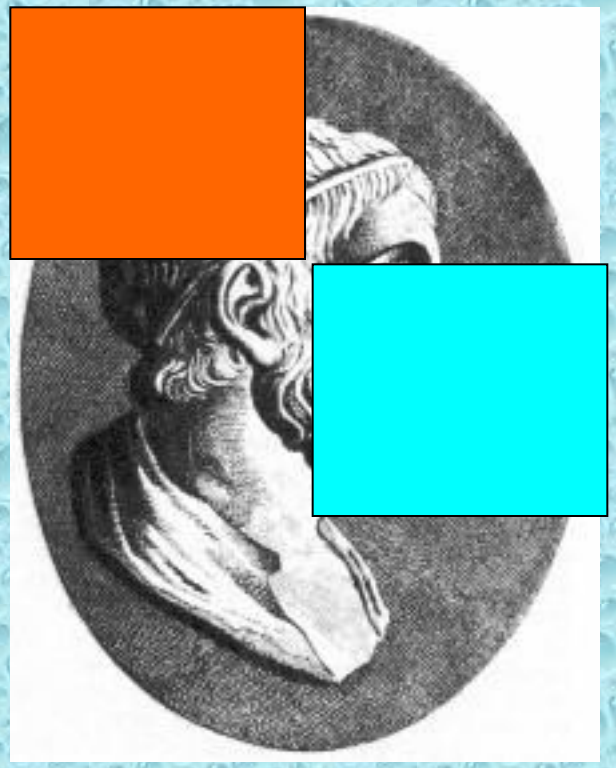
12

НОК (6 ; 4) ??



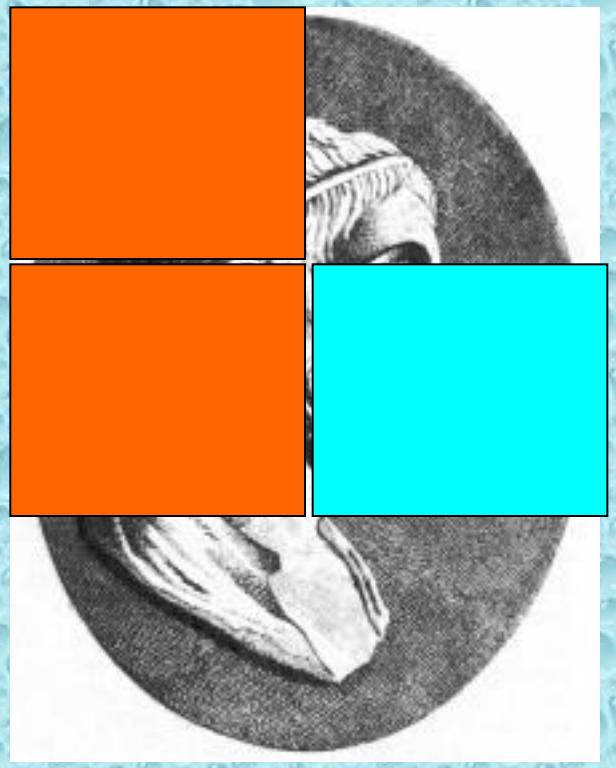
12	24
6	2
3	64
46	67

АППЛОДИСМЕНТЫ!



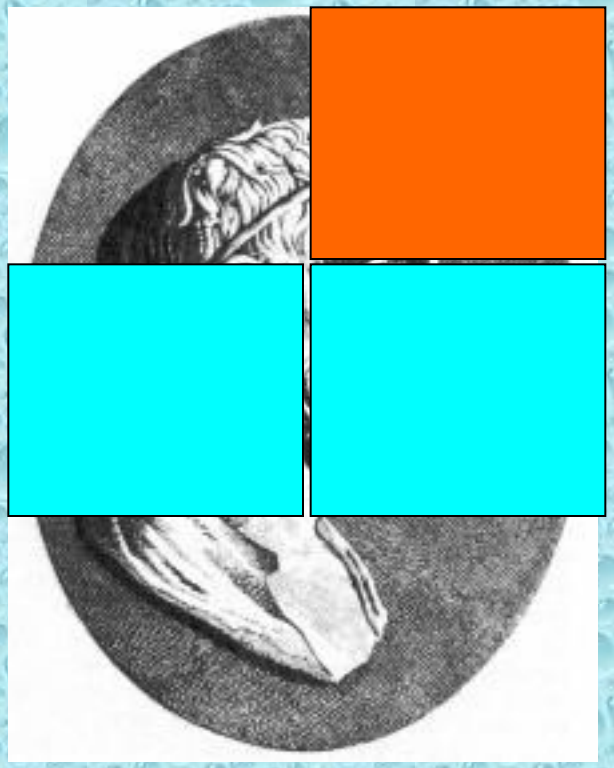
12

ОБИДНО!



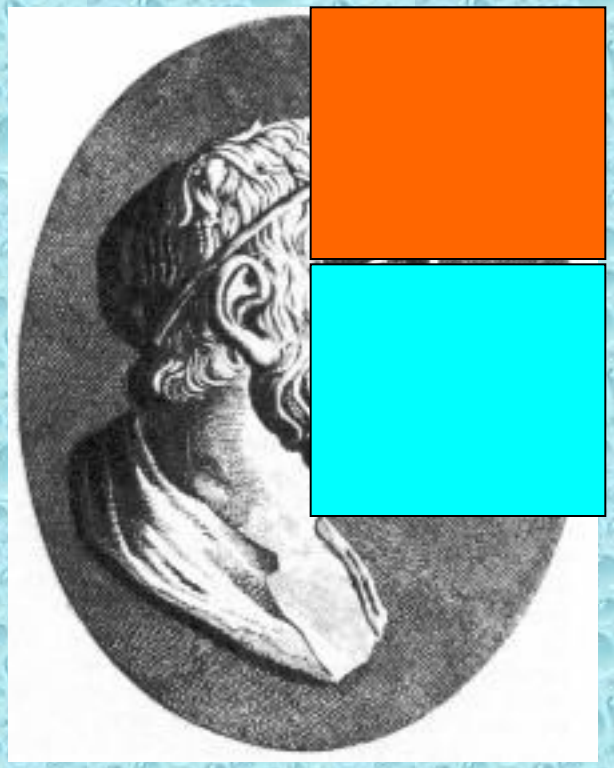
12

НОК (6 ; 4) ???



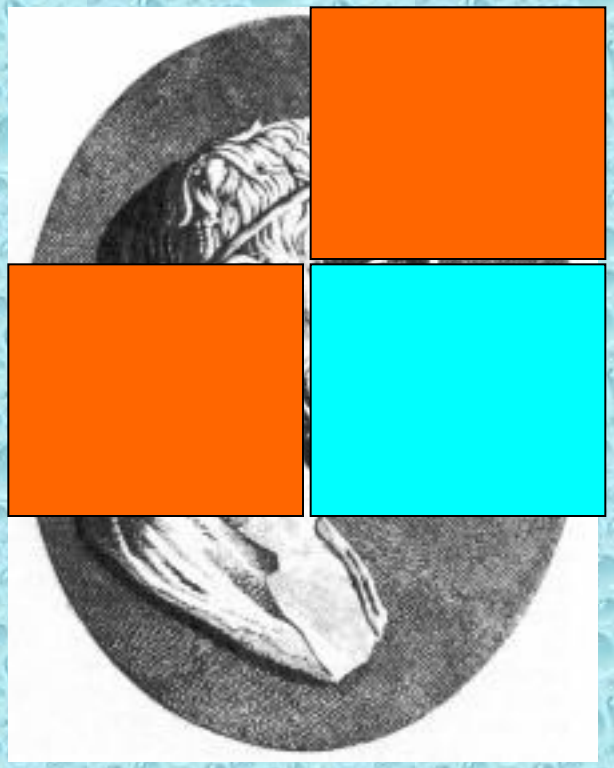
12	24
6	2
3	64
46	67

ОСТАЛОСЬ 1 ЗАДАНИЕ!



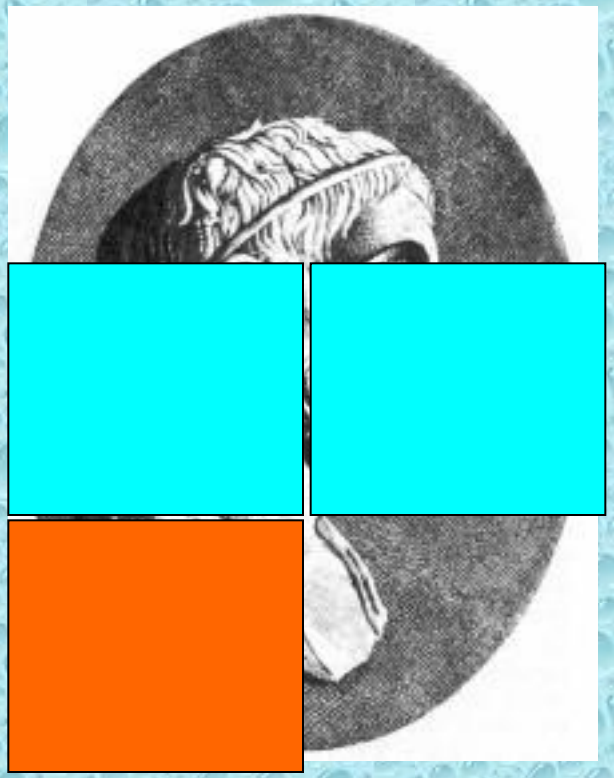
12

БУДЬТЕ ВНИМАТЕЛЬНЕЕ!



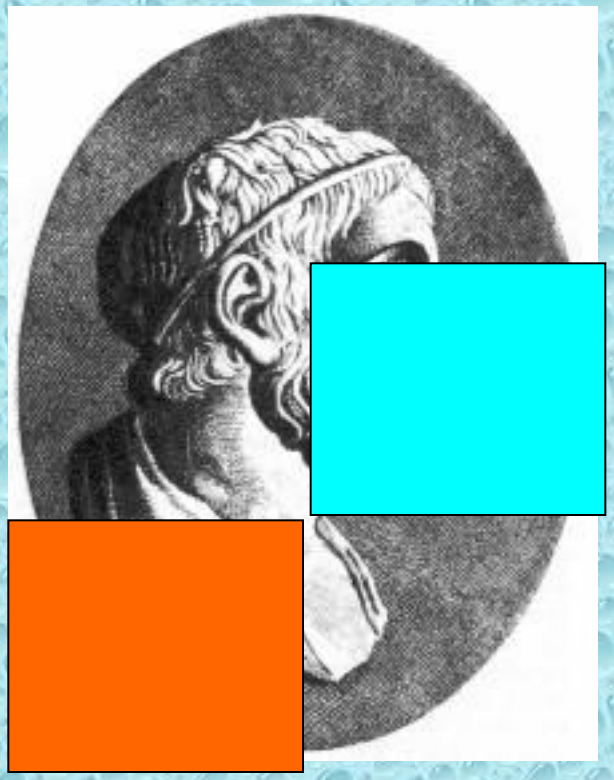
12

НОК (6 ; 4) ????



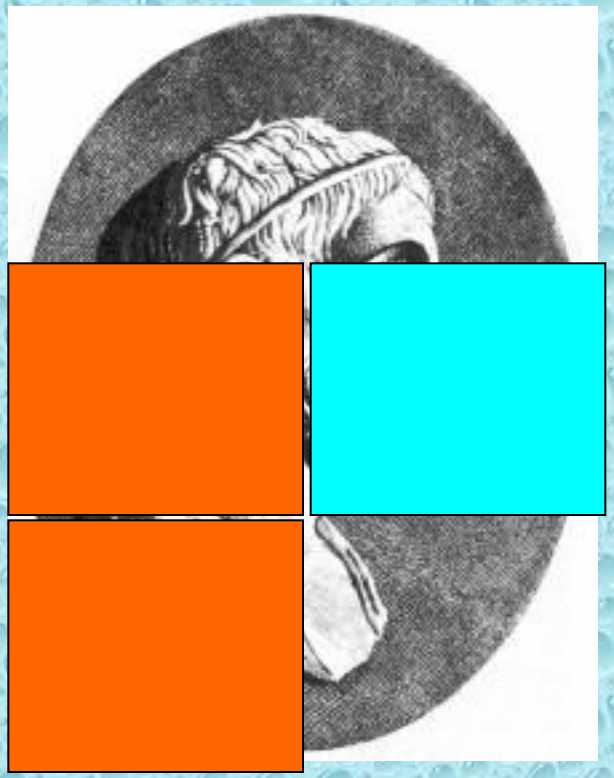
12	24
6	2
3	64
46	67

БРАВО!



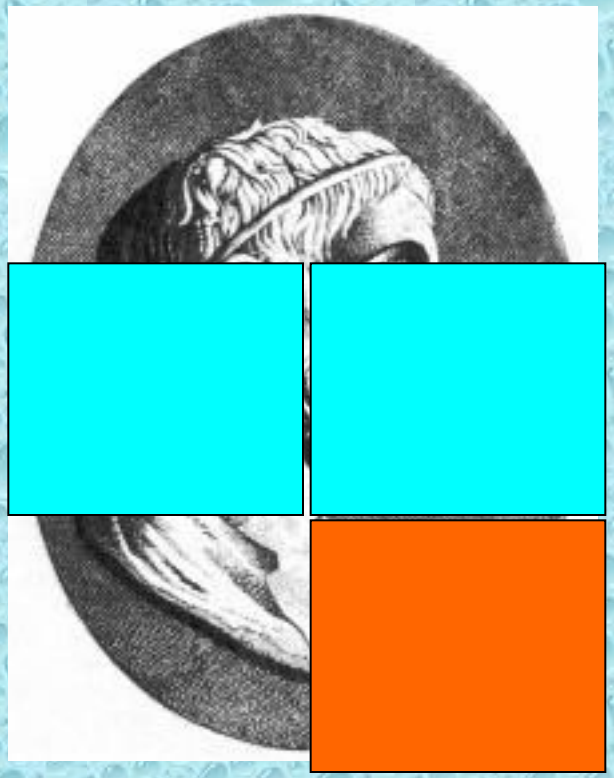
12

ЭХ, НЕ ПОВЕЗЛО!



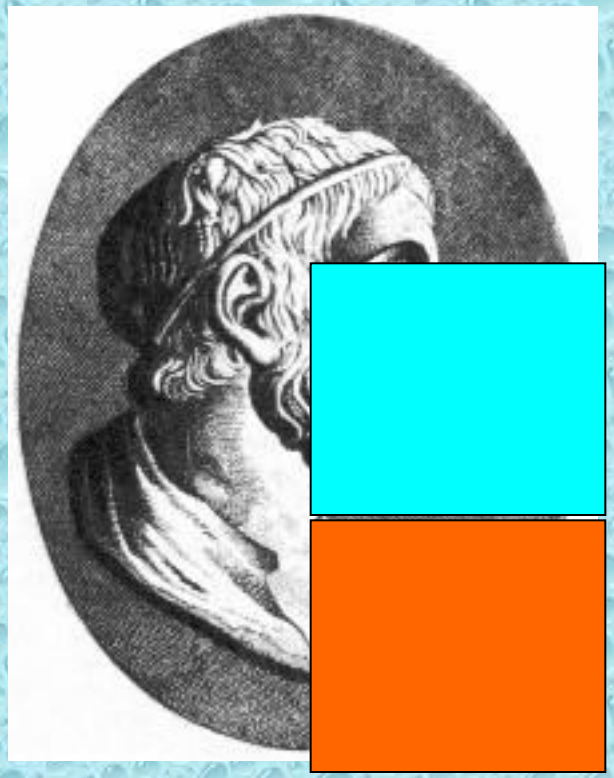
12

НОК (6 ; 4) ?????



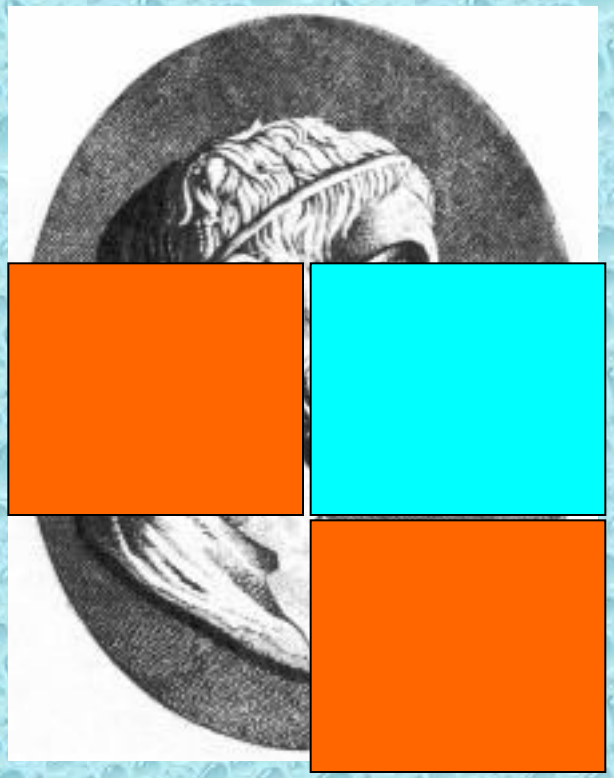
12	24
6	2
3	64
46	67

НЕЛЬЗЯ НЕ СОГЛАСИТЬСЯ!



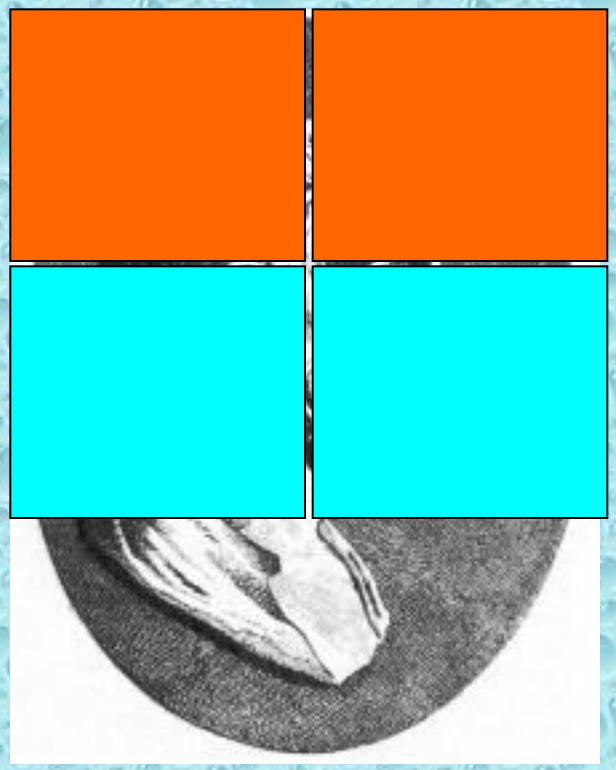
12

ПОЛОСА НЕВЕЗЕНИЯ?!



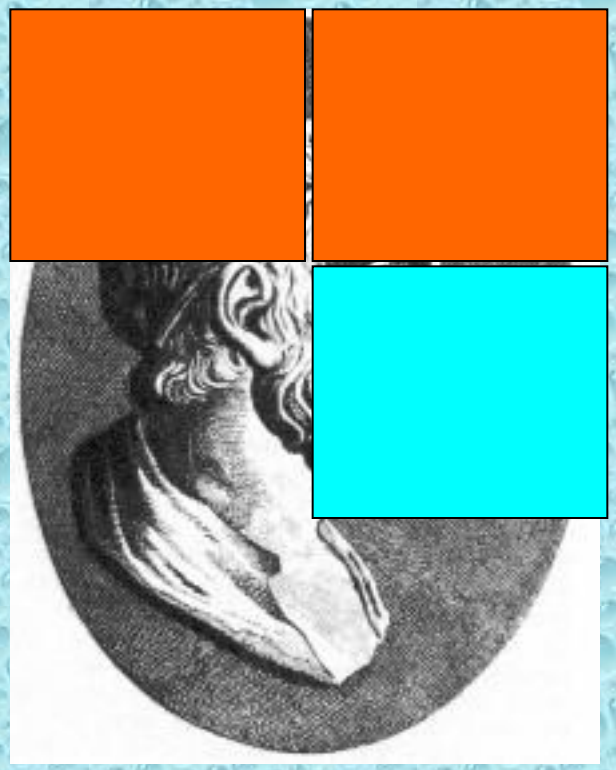
12

НОК (6 ; 4) .



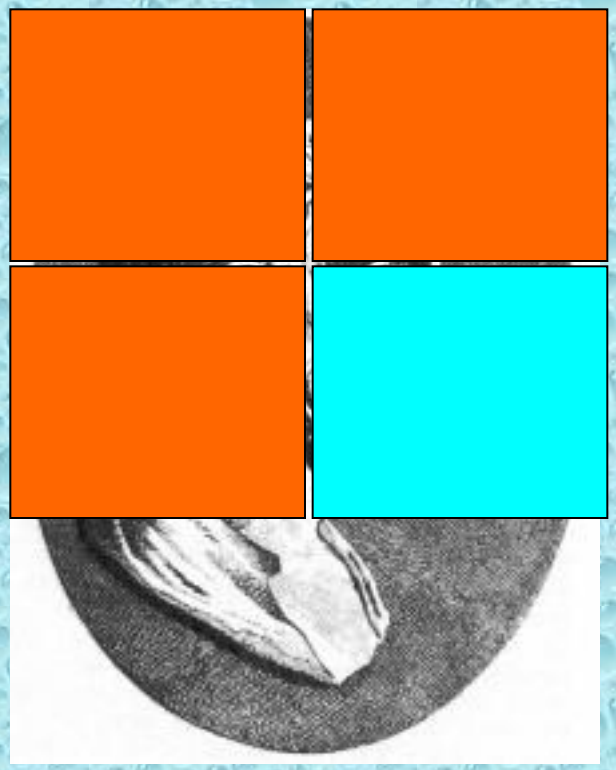
12	24
6	2
3	64
46	67

В ЦЕЛЬ, ОТЛИЧНО!



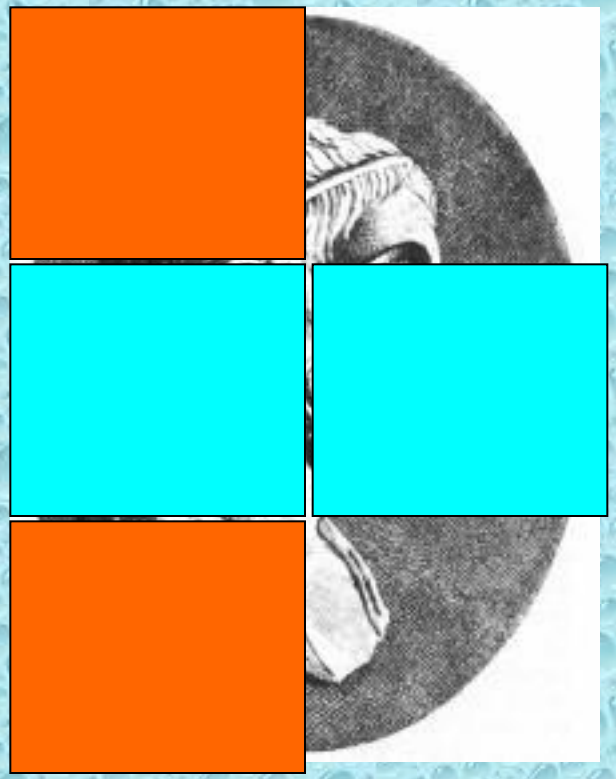
12

А ЕСЛИ ПОДУМАТЬ!



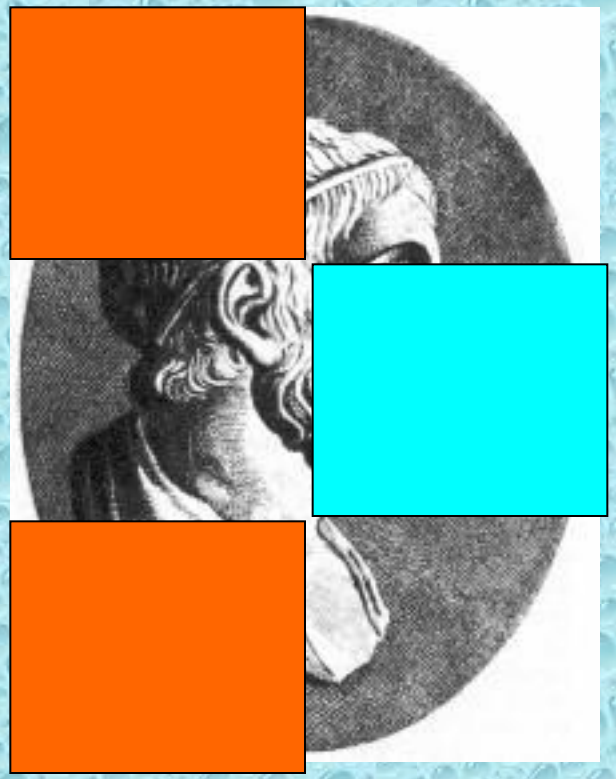
12

НОК (6 ; 4) ..



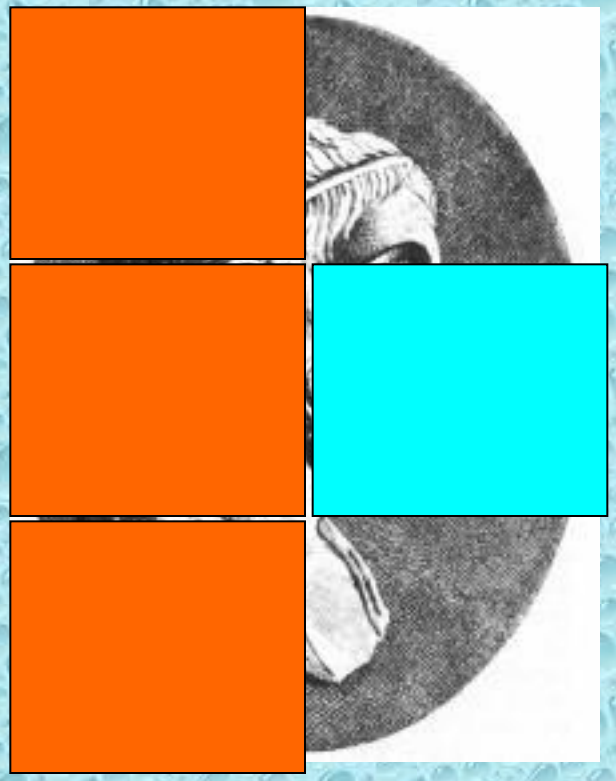
12	24
6	2
3	64
46	67

У ВАС ЕЩЕ ЕСТЬ ШАНСЫ!



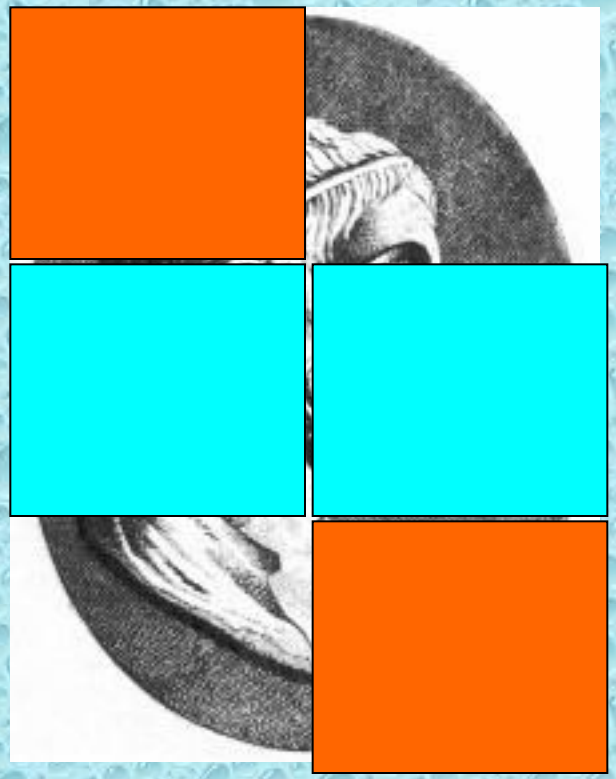
12

ОЧЕРЕДНАЯ ОШИБКА!



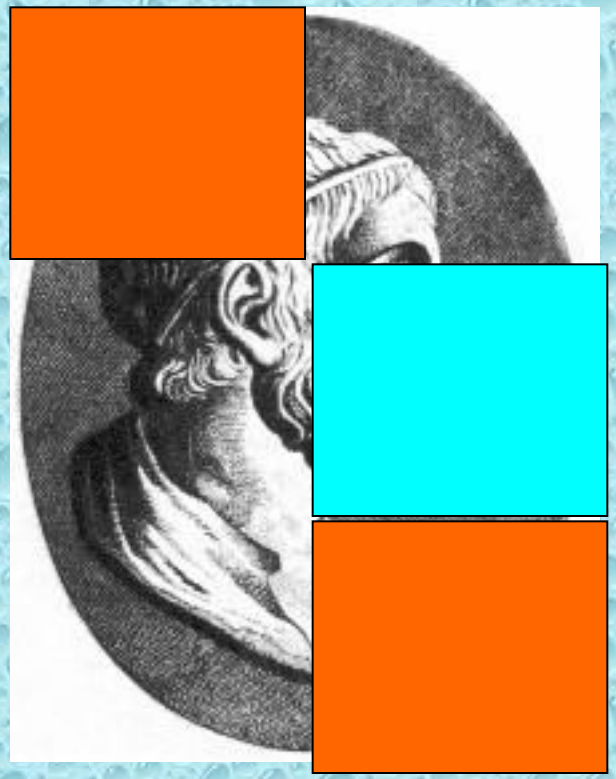
12

НОК (6 ; 4) …



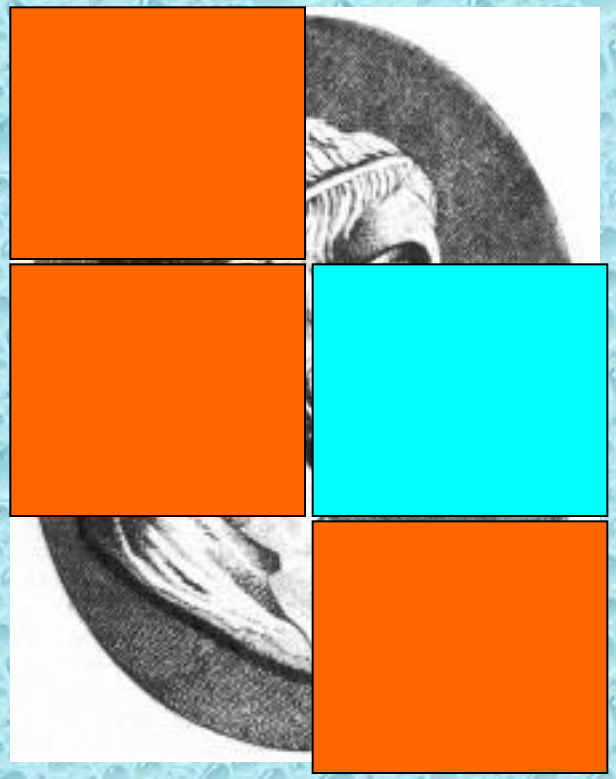
12	24
6	2
3	64
46	67

ПОЧТИ…



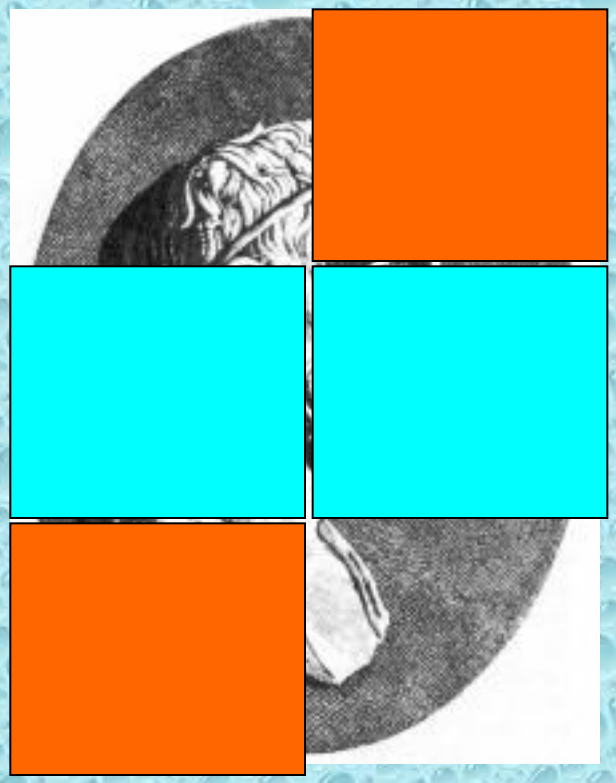
12

НЕТ СЛОВ…



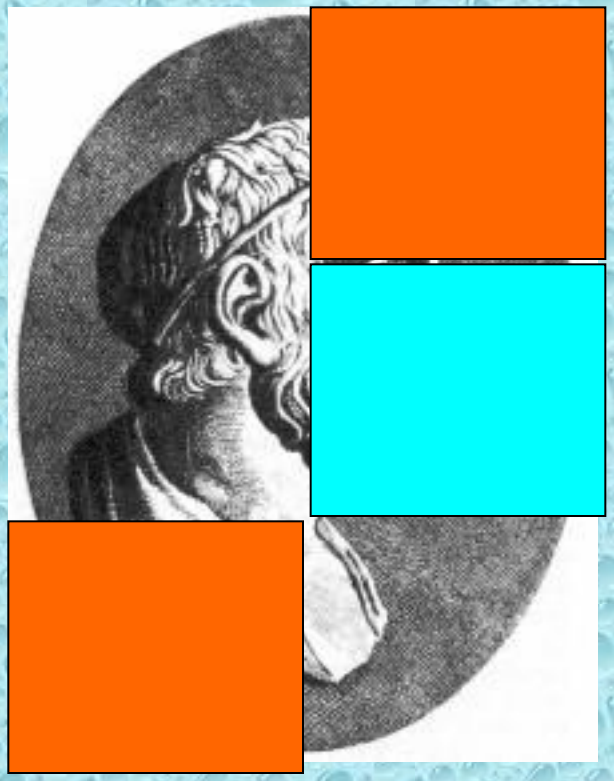
12

НОК (6 ; 4) ?.?



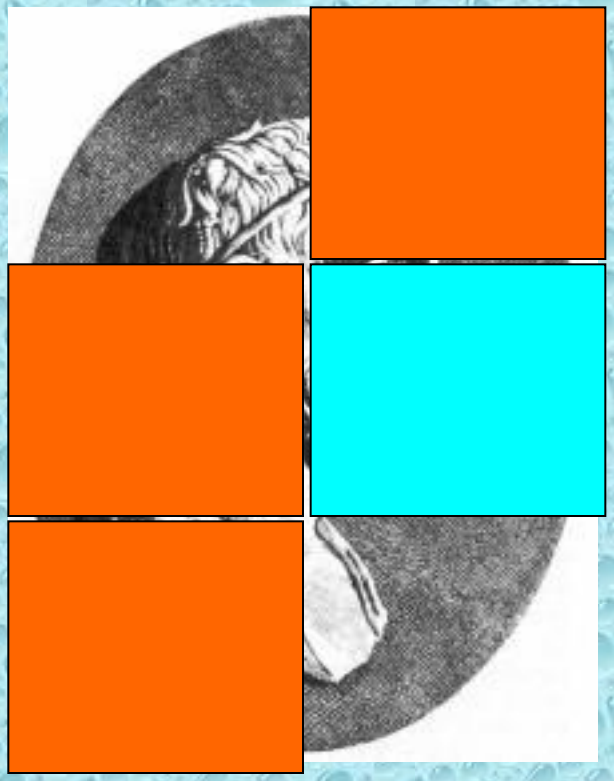
12	24
6	2
3	64
46	67

СКОРО ОТКРОЕМ КАРТИНКУ



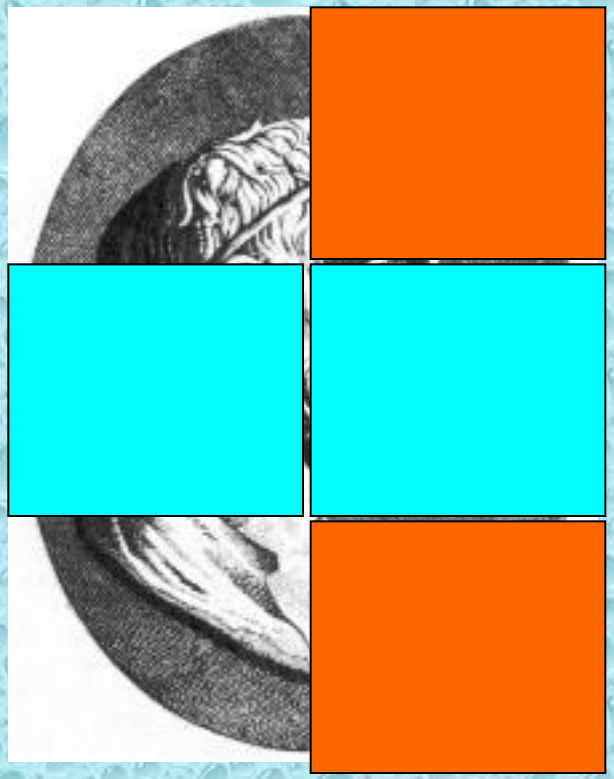
12

И КАК ВЫ ГОТОВИЛИСЬ?



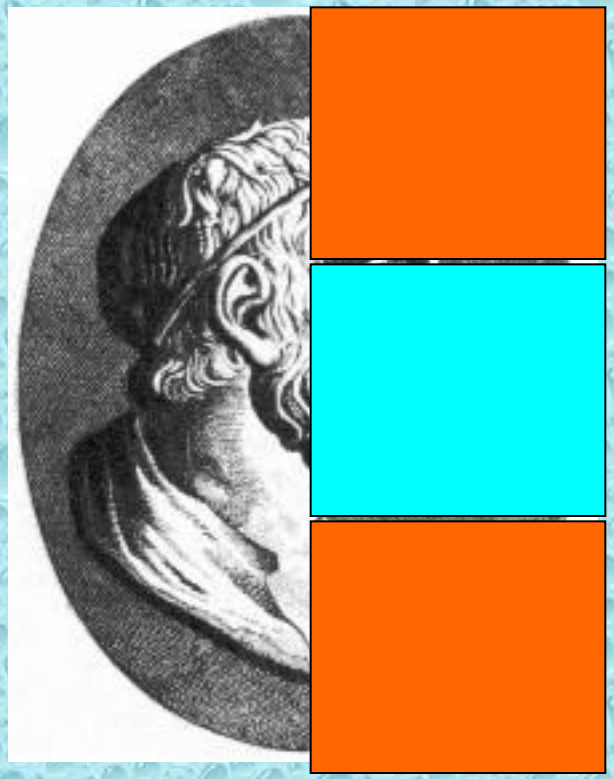
12

НОК (6 ; 4) ?.?.



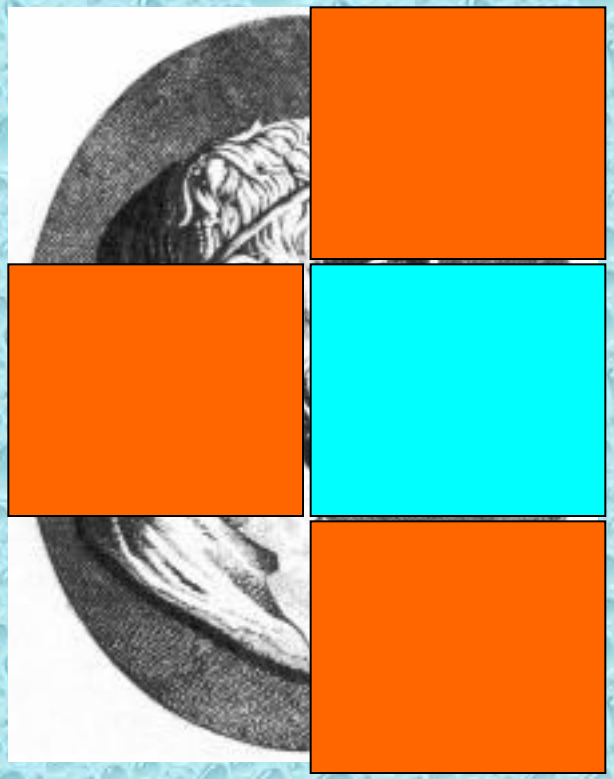
12	24
6	2
3	64
46	67

ВЕРНО.



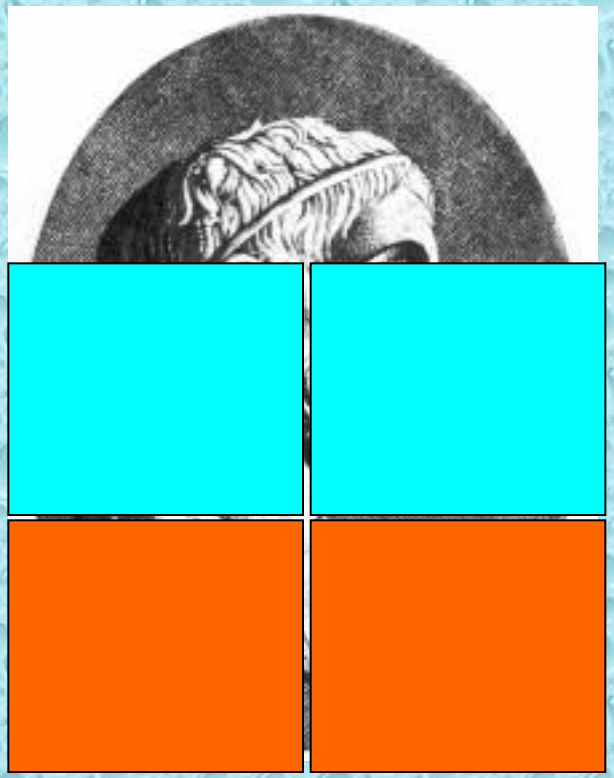
12

ОЧЕРЕДНАЯ ОШИБКА.



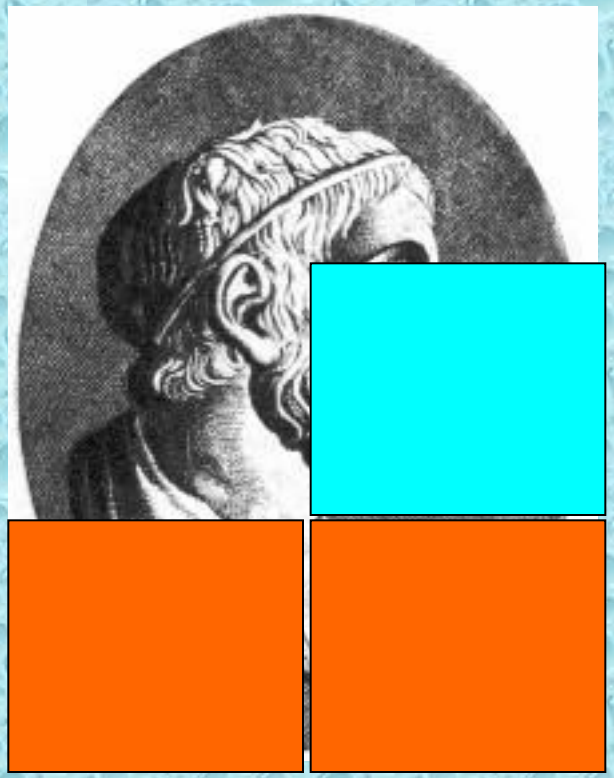
12

НОК (6 ; 4) ?.?.!



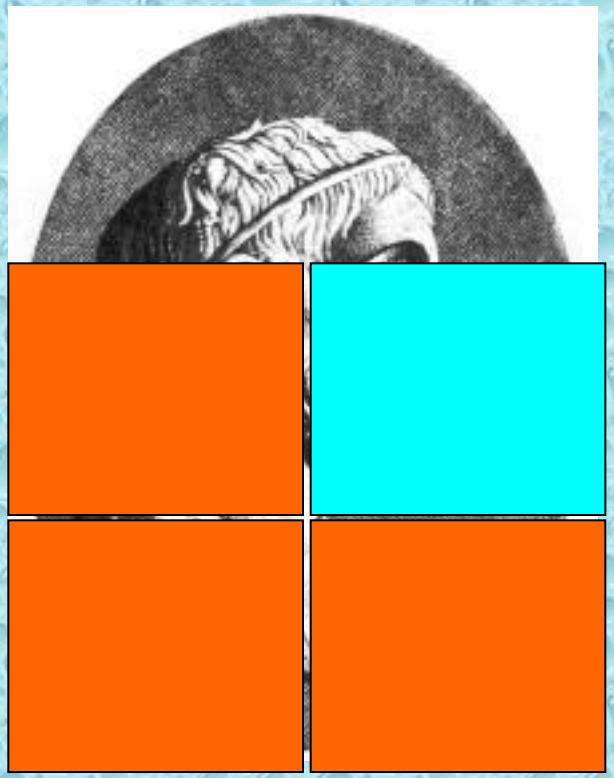
12	24
6	2
3	64
46	67

СОГЛАСИМСЯ.



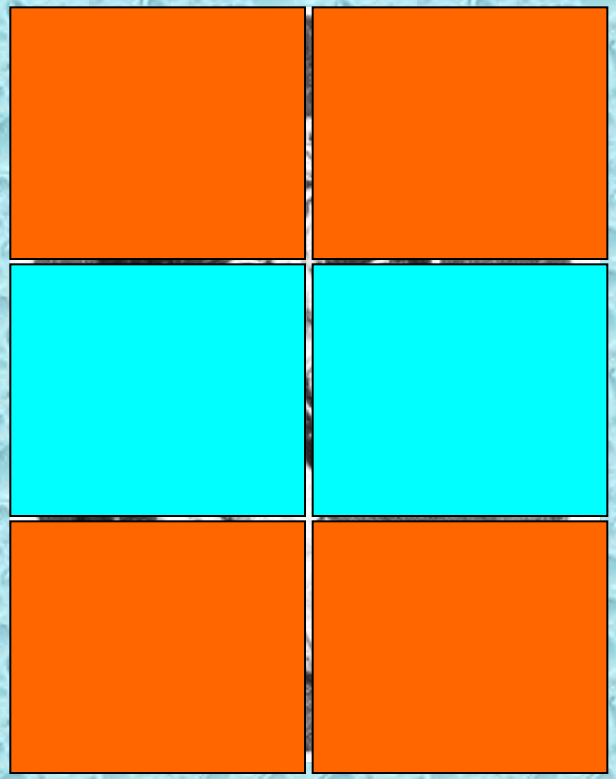
12

СТЫДНО…



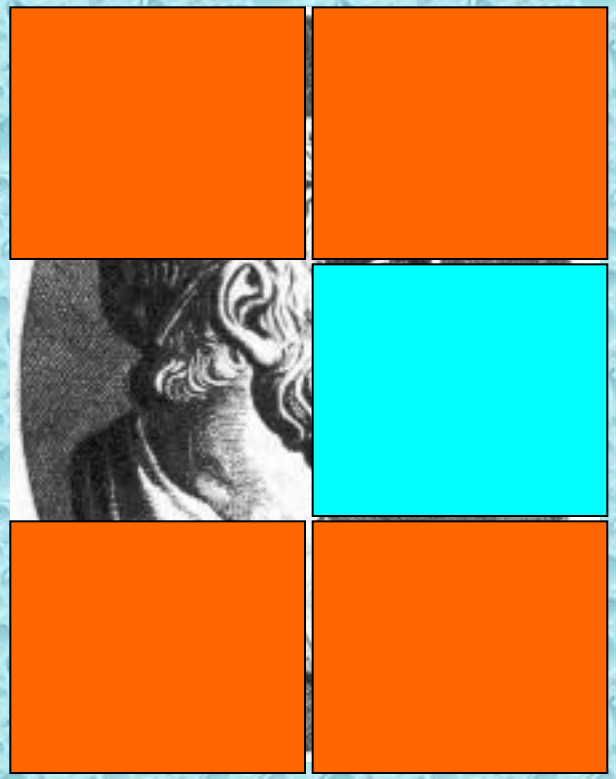
12

НОК (6 ; 4)



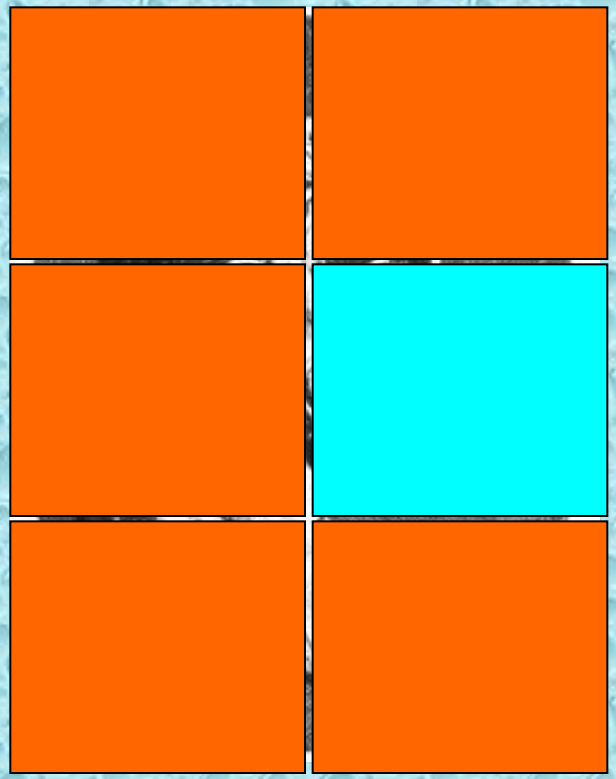
12	24
6	2
3	64
46	67

НАКОНЕЦ-ТО.



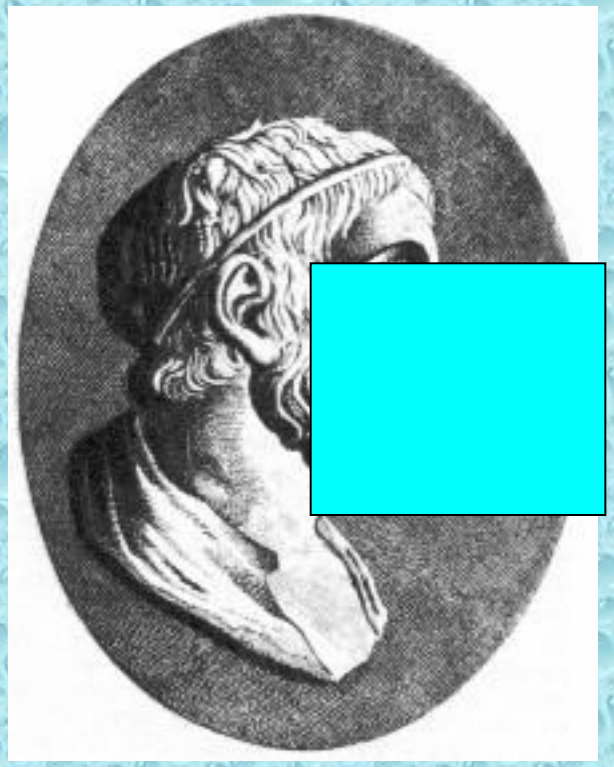
12

ДАЛЬШЕ СМЫСЛА НЕТ…



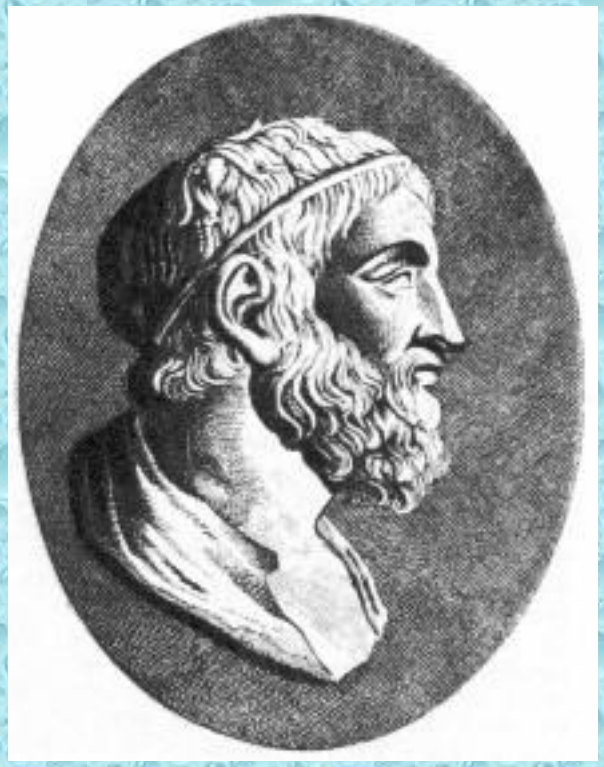
12

НОК (12 ; 9) ?



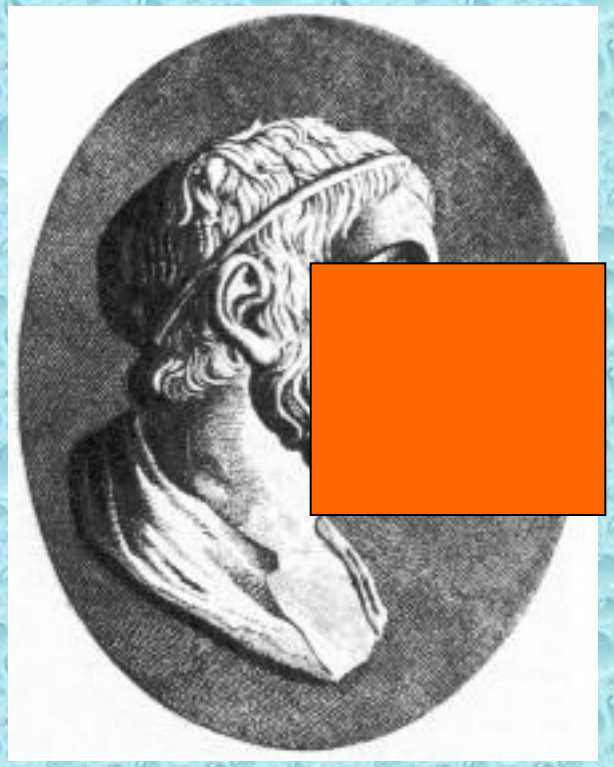
12	9
3	276
36	63
24	55

МОЛОДЦЫ!!!



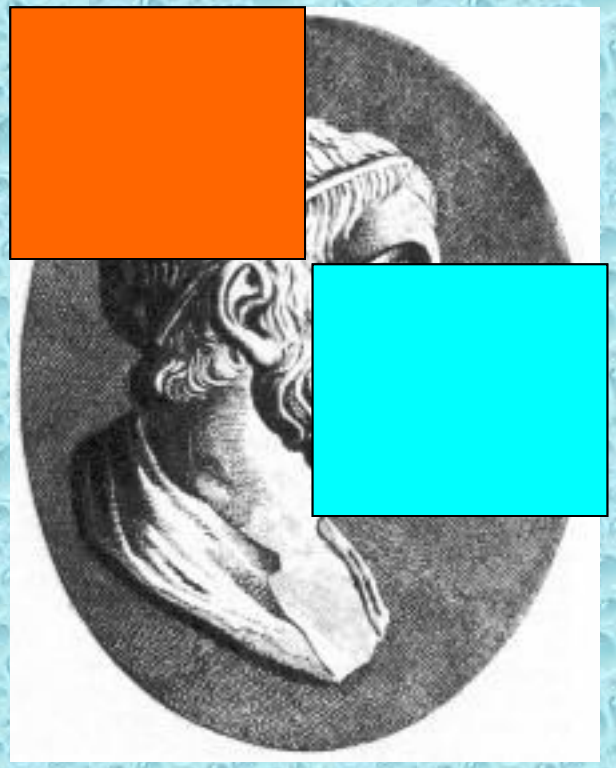
36

НУ ВОТ! ТЕПЕРЬ ГАДАЙТЕ.



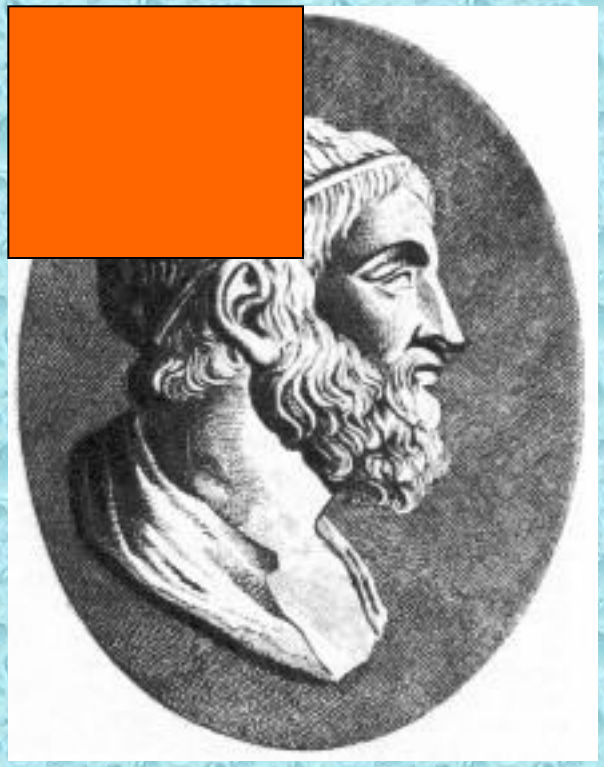
36

НОК (12 ; 9) ??



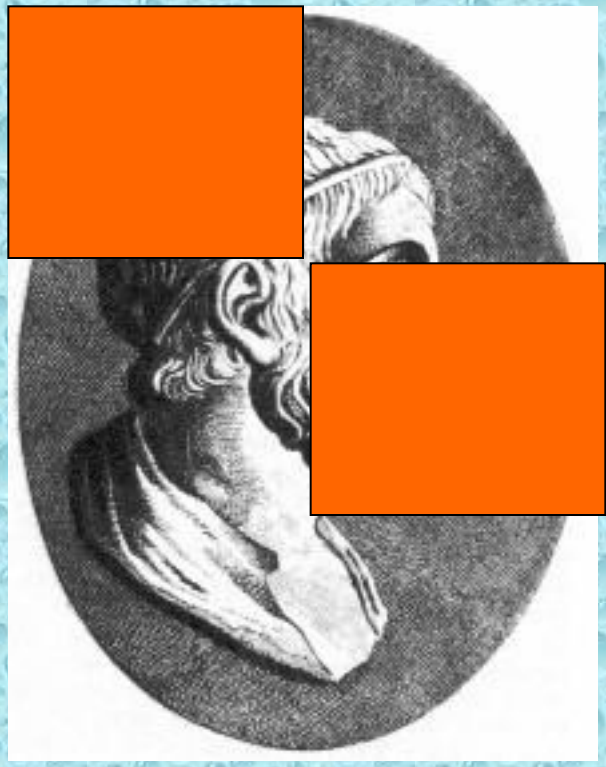
12	9
3	276
36	63
24	55

НУ И КТО ЭТО?



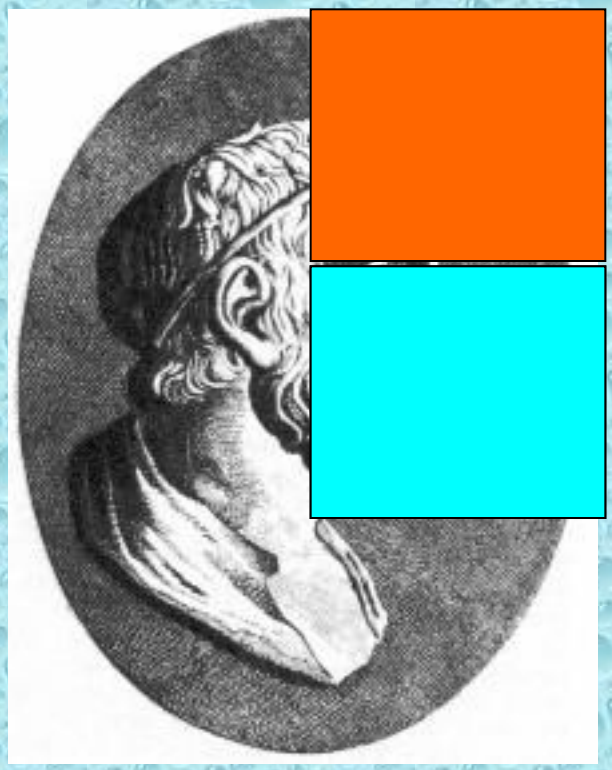
36

ДОГАДАЛИСЬ?



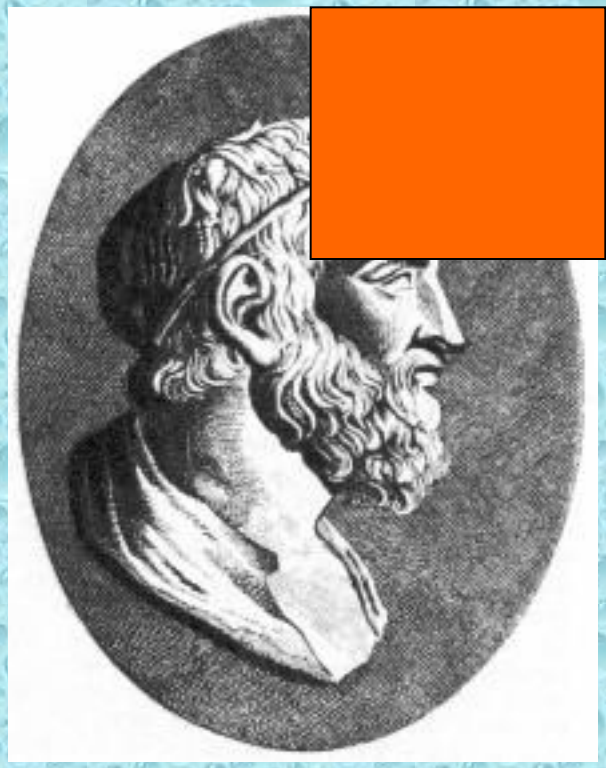
36

НОК (12 ; 9) ???



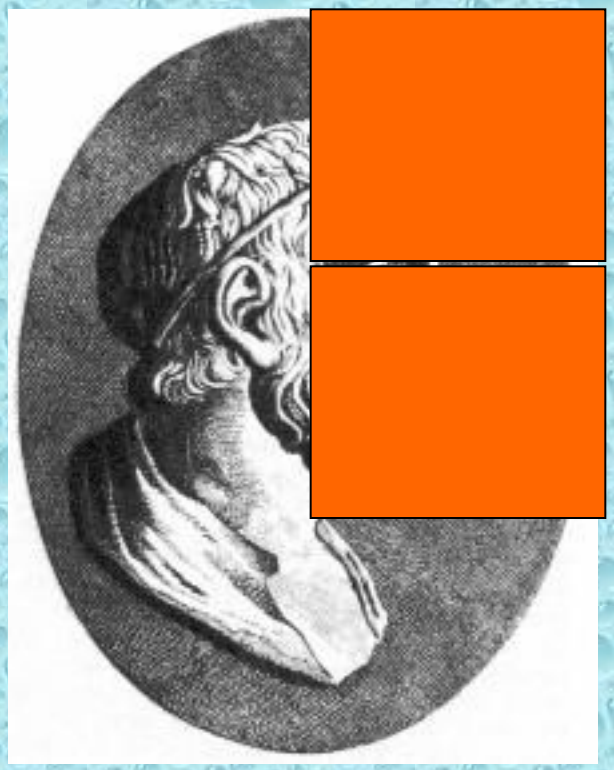
12	9
3	276
36	63
24	55

УЗНАЛИ?



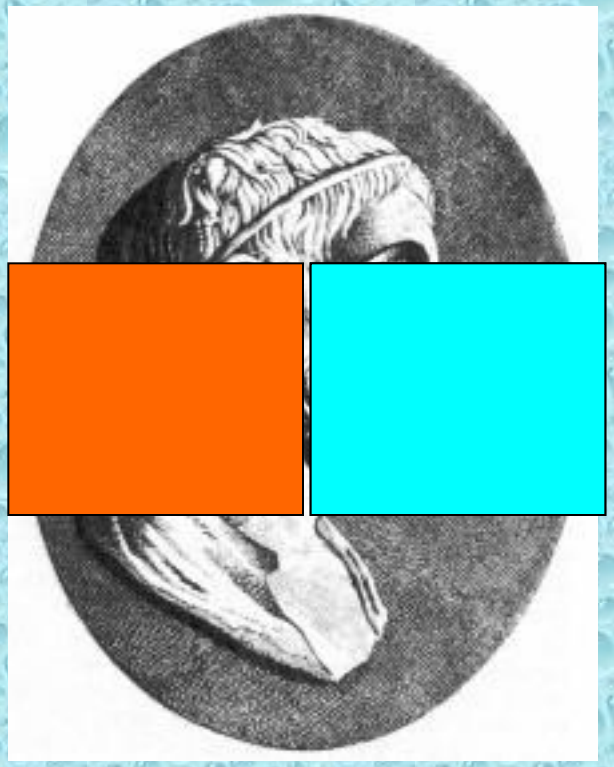
36

??????????



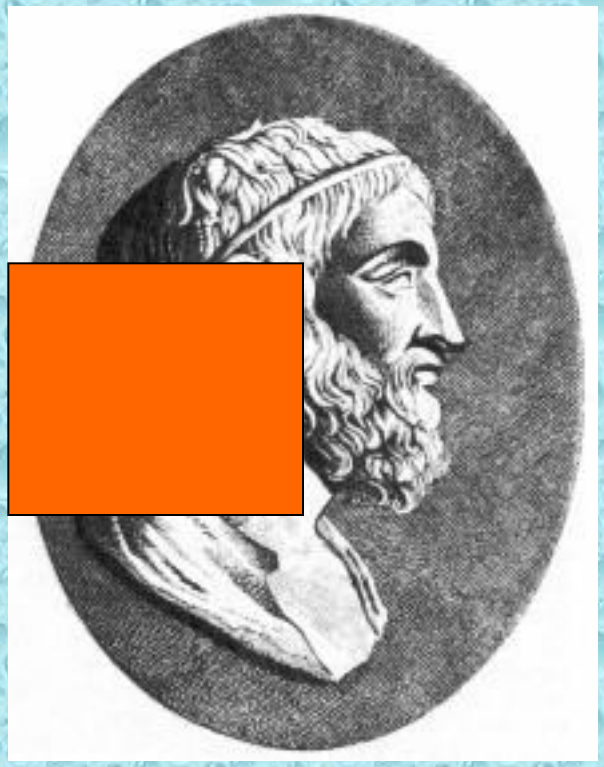
36

НОК (12 ; 9) ????



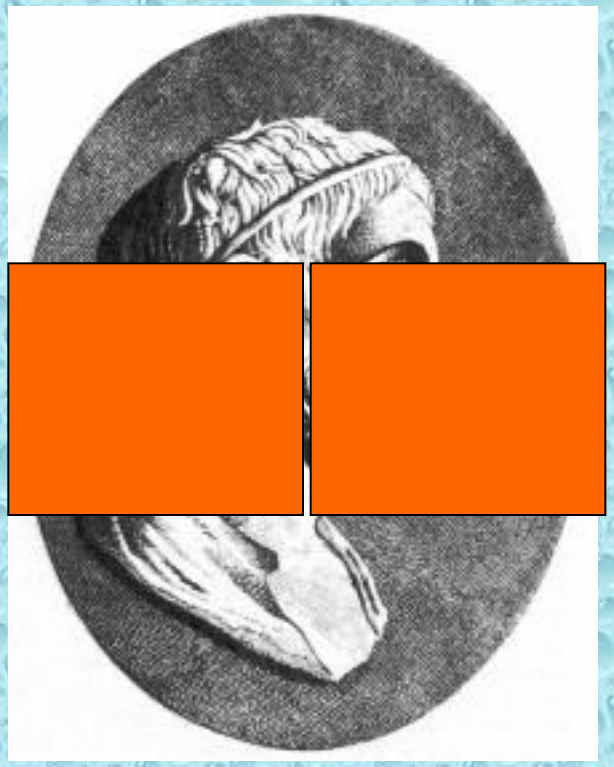
12	9
3	276
36	63
24	55

ИТАК, КТО ЭТО?



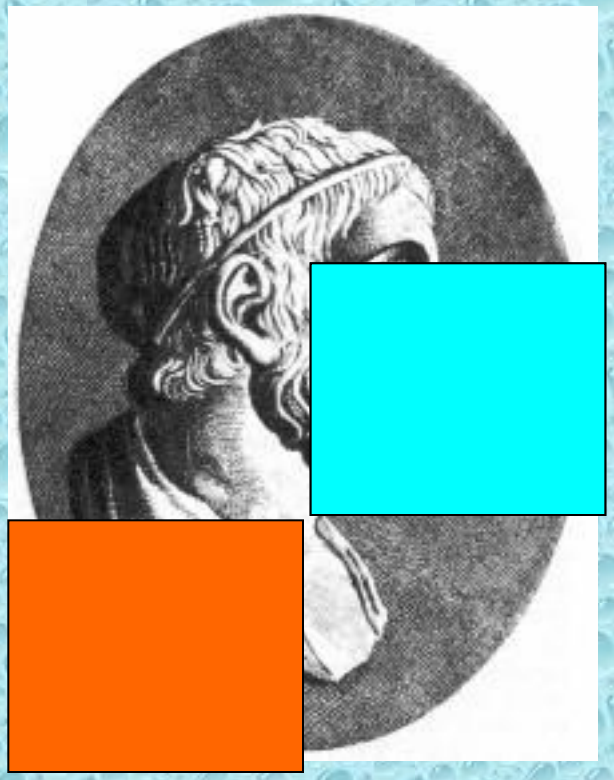
36

ОБИДНО?



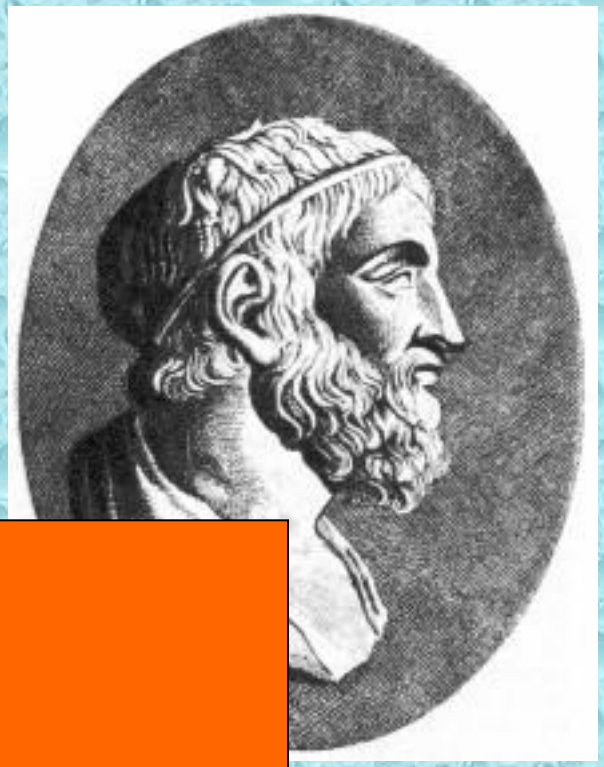
36

НОК (12 ; 9) ?????



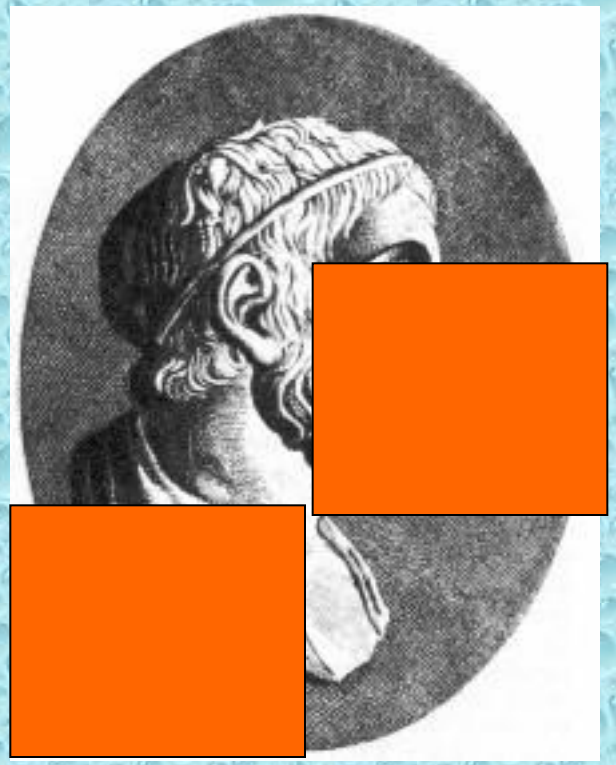
12	9
3	276
36	63
24	55

ЧТО Ж, НЕПЛОХО ?



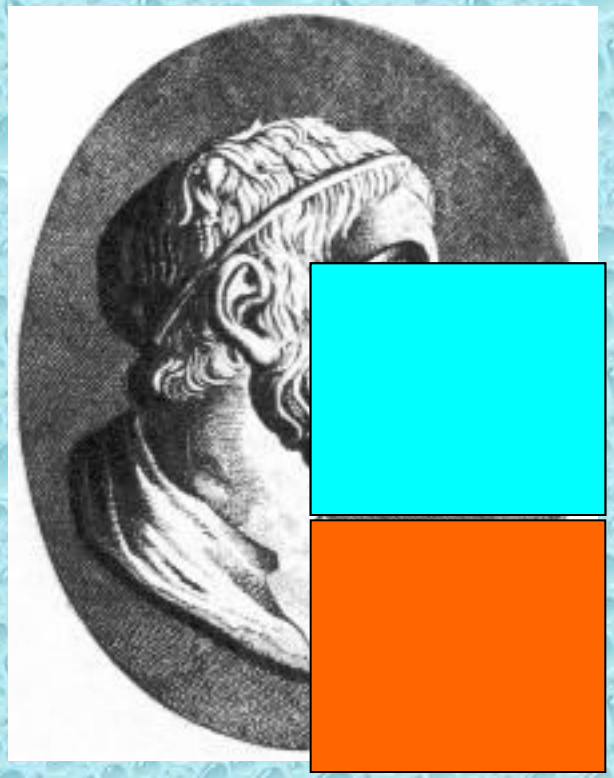
36

ПРАВДА, ОБИДНО?



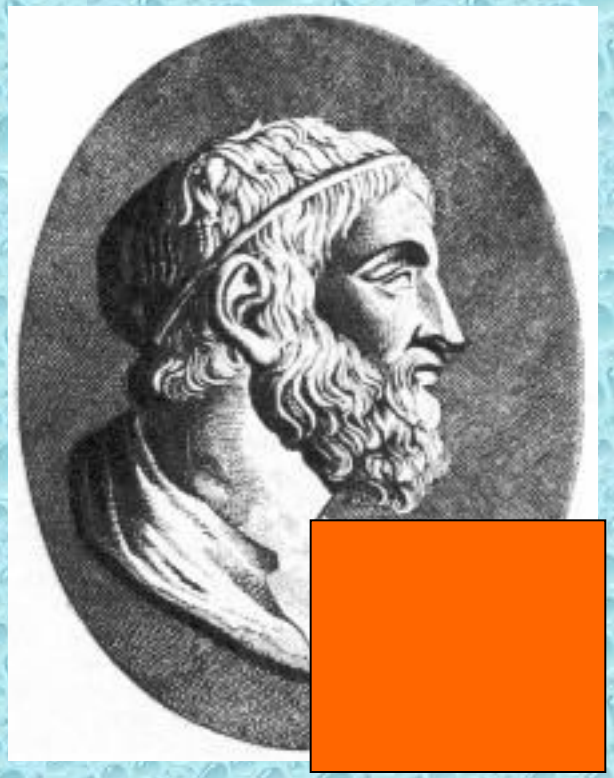
36

НОК (12 ; 9) ??????



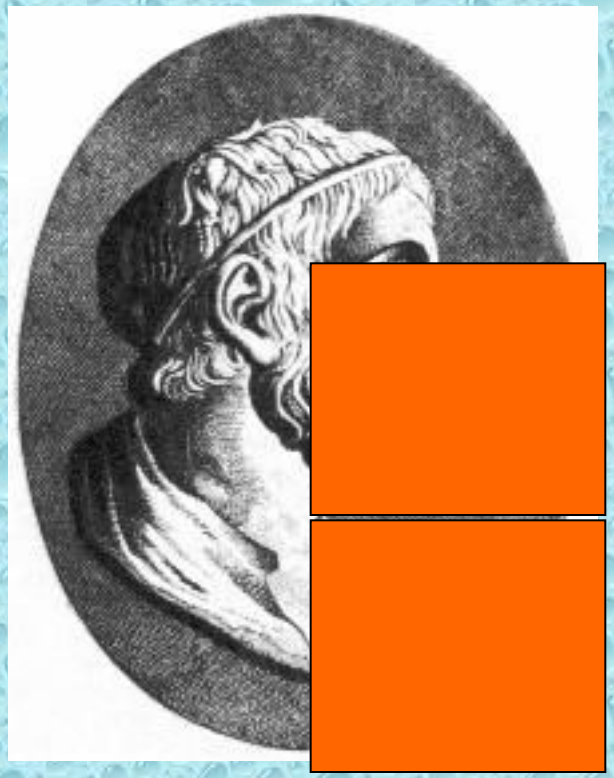
12	9
3	276
36	63
24	55

ДУМАЮ, ДОГАДАЛИСЬ ?



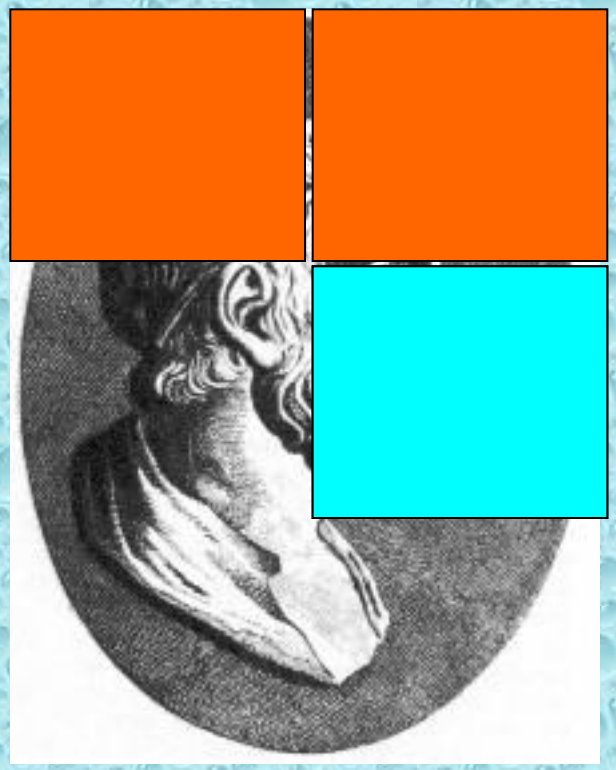
36

УЗНАТЬ НЕПРОСТО.



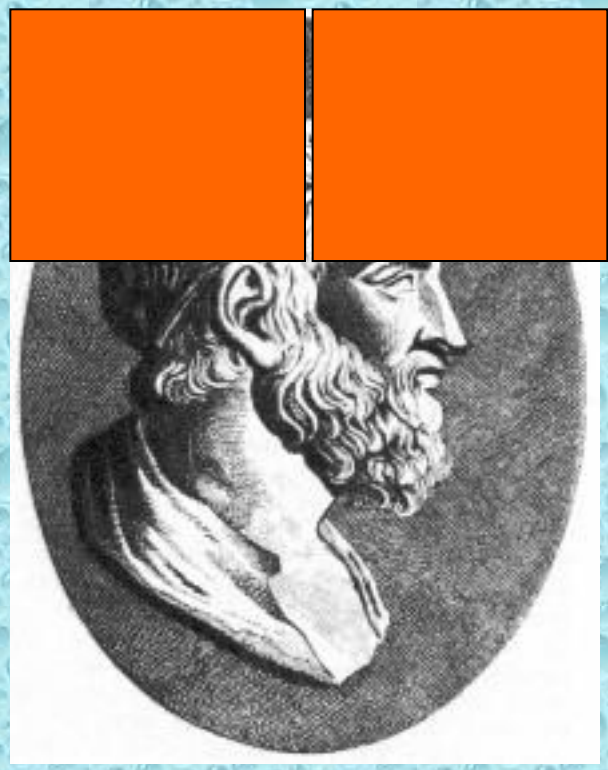
36

НОК (12 ; 9) .



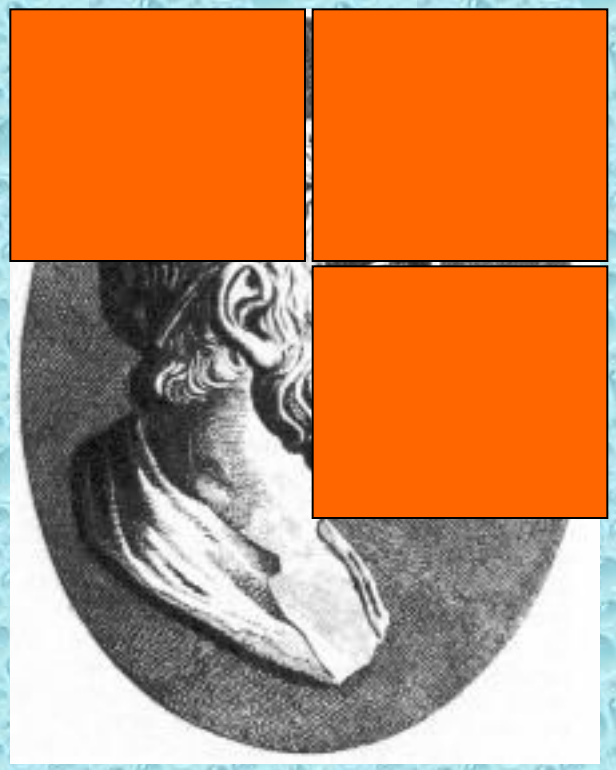
12	9
3	276
36	63
24	55

СМОЖЕТЕ УЗНАТЬ ?



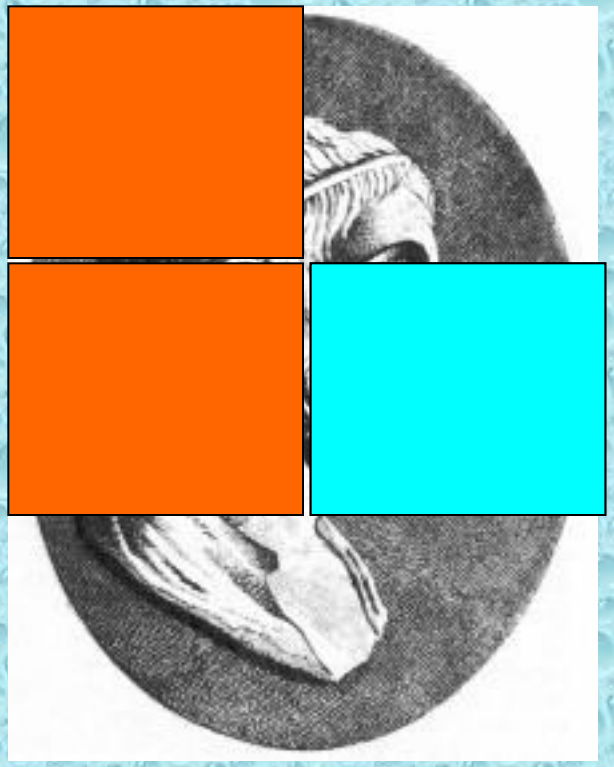
36

50% УСПЕХА.



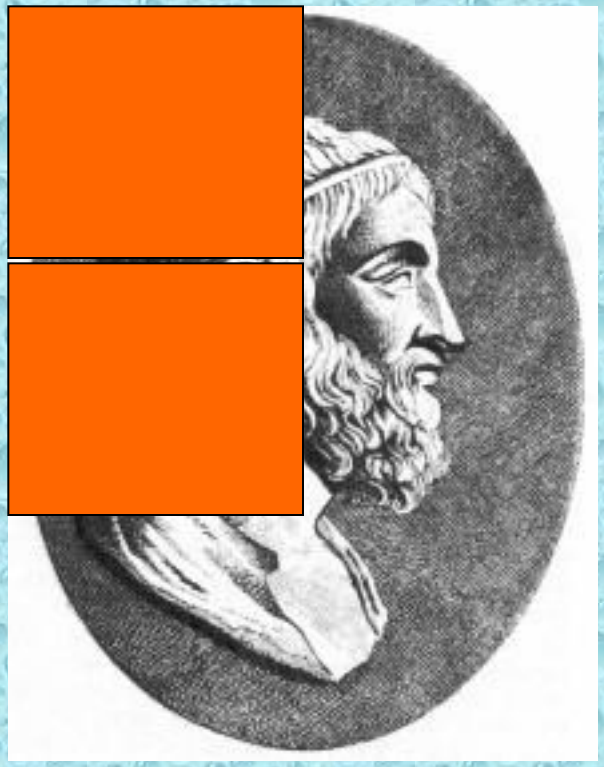
36

НОК (12 ; 9) ..



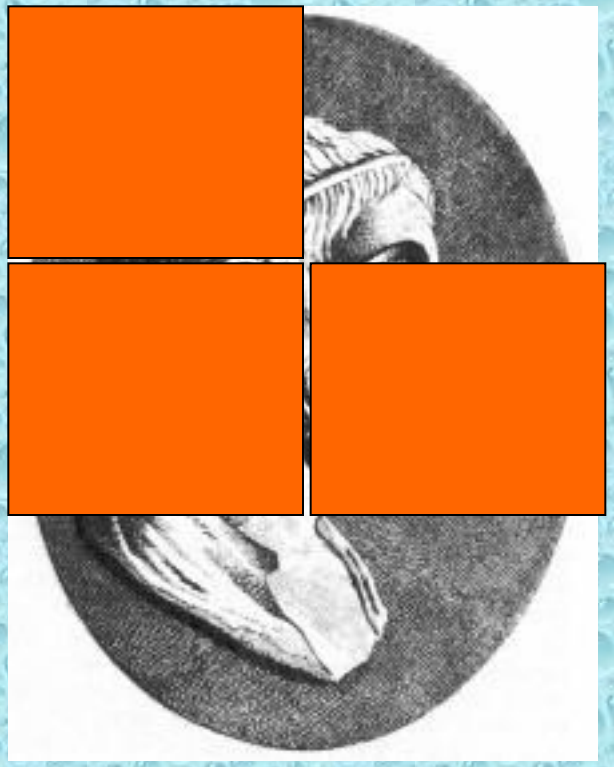
12	9
3	276
36	63
24	55

ПОПРОБУЙТЕ УЗНАТЬ ?



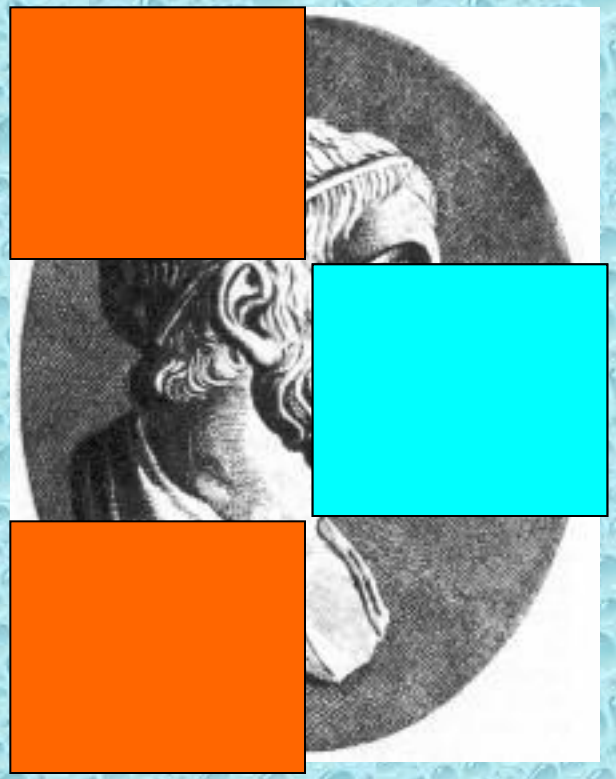
36

НЕ АХ.



36

НОК (12 ; 9) …

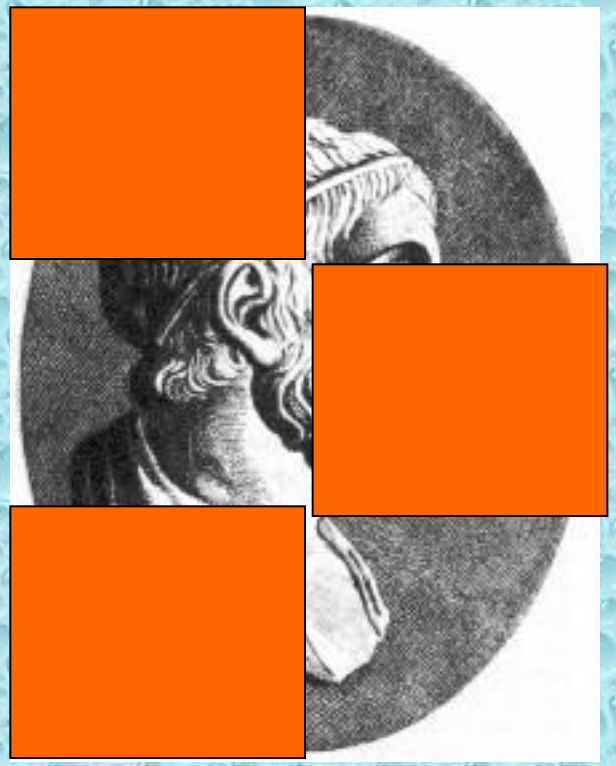


12	9
3	276
36	63
24	55

И КТО ЖЕ ЭТО ?

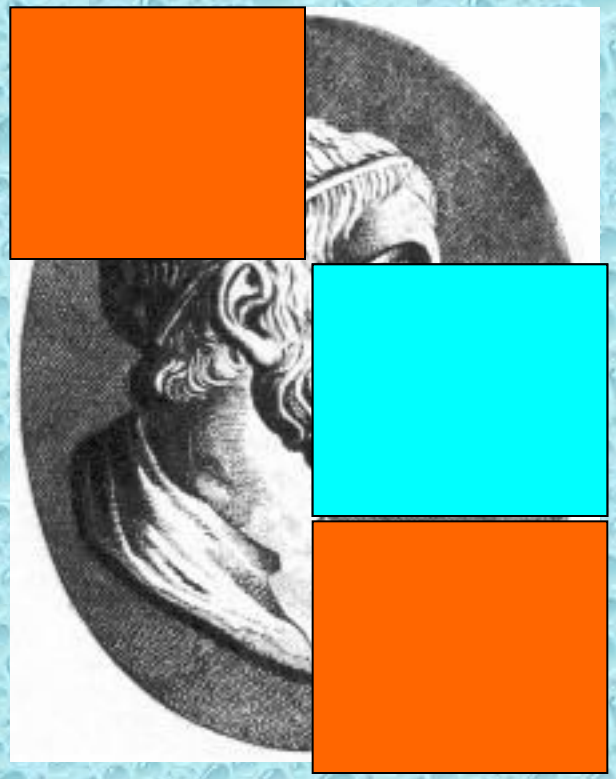
36

ГРУСТНО.



36

НОК (12 ; 9) ….

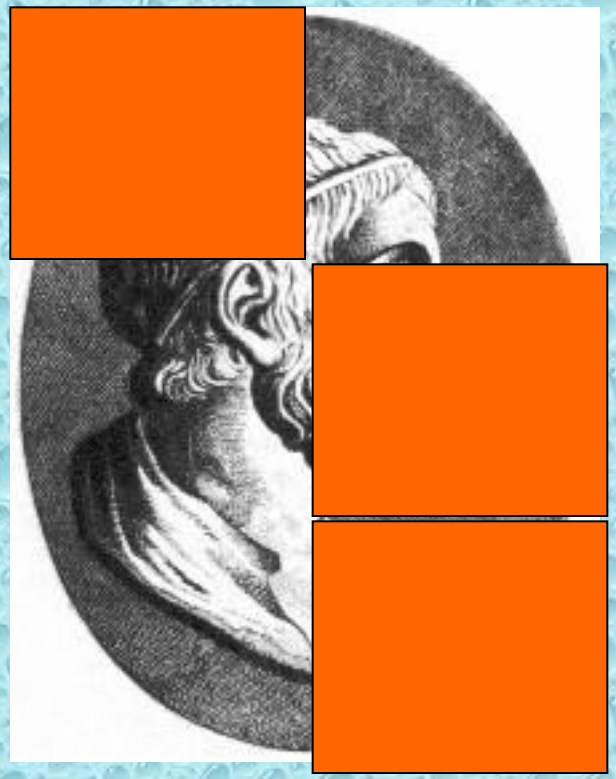


12	9
3	276
36	63
24	55

УЗНАЛИ ?

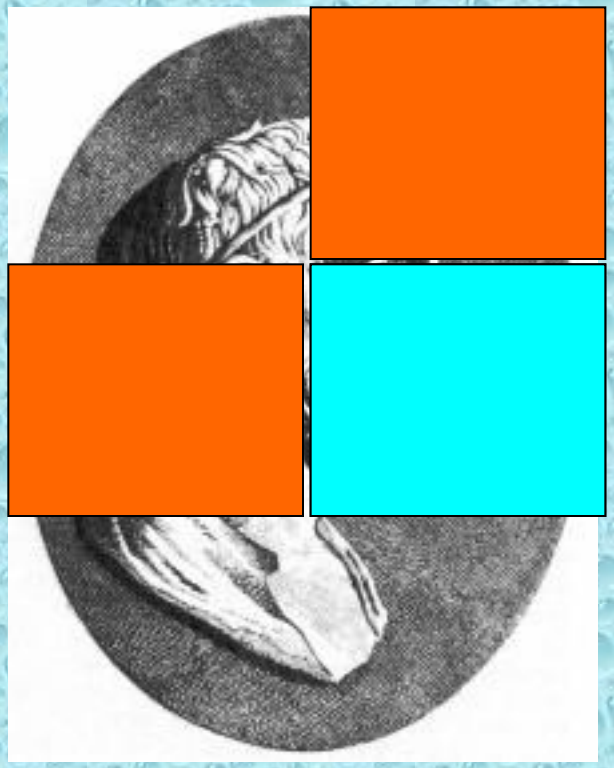
36

СЛАБЫЙ РЕЗУЛЬТАТ.



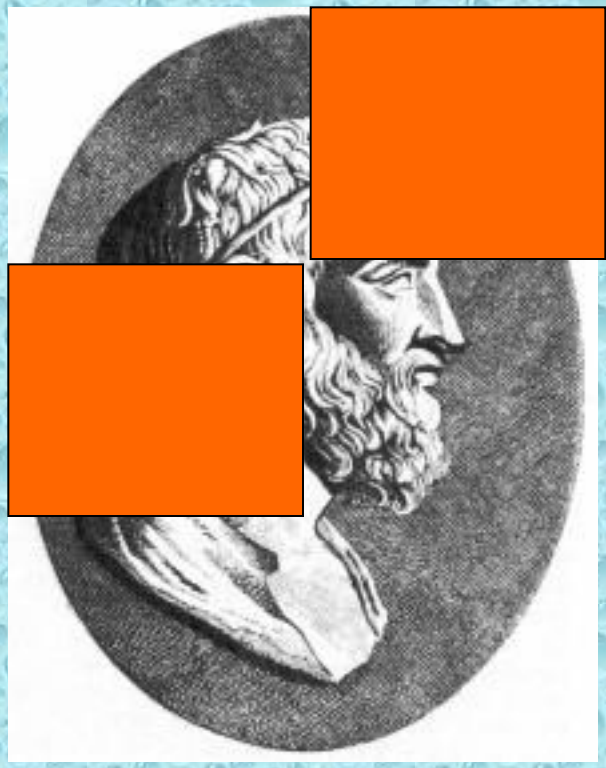
36

НОК (12 ; 9) ?.



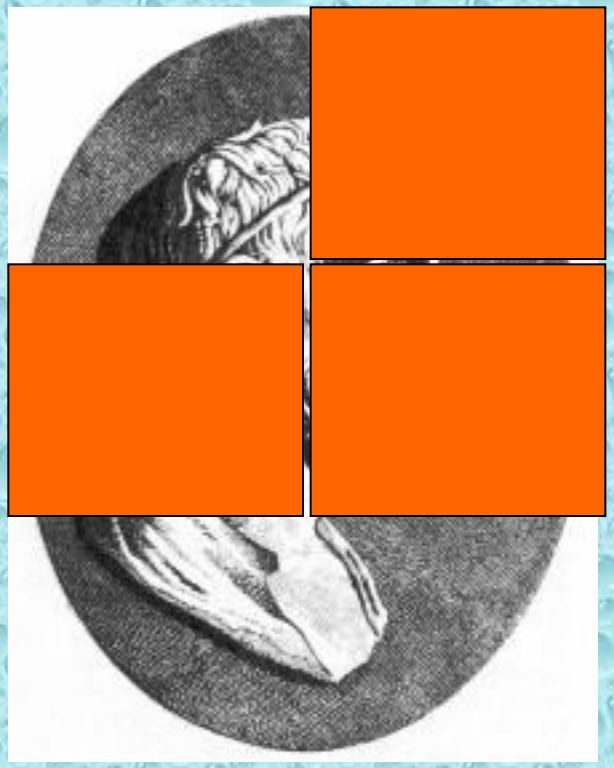
12	9
3	276
36	63
24	55

КТО ЭТОТ ЧЕЛОВЕК ?



36

ОЧЕНЬ СЛАБО.



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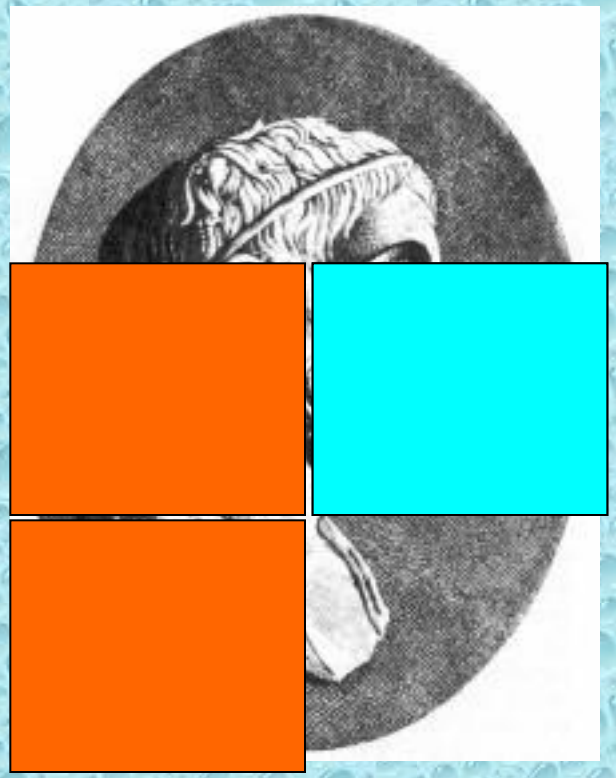
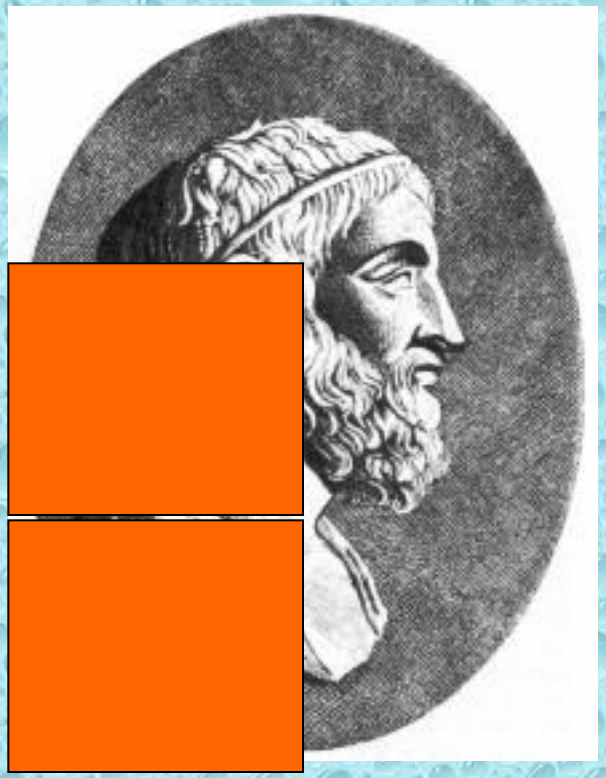
НОК (12 ; 9) ?.?



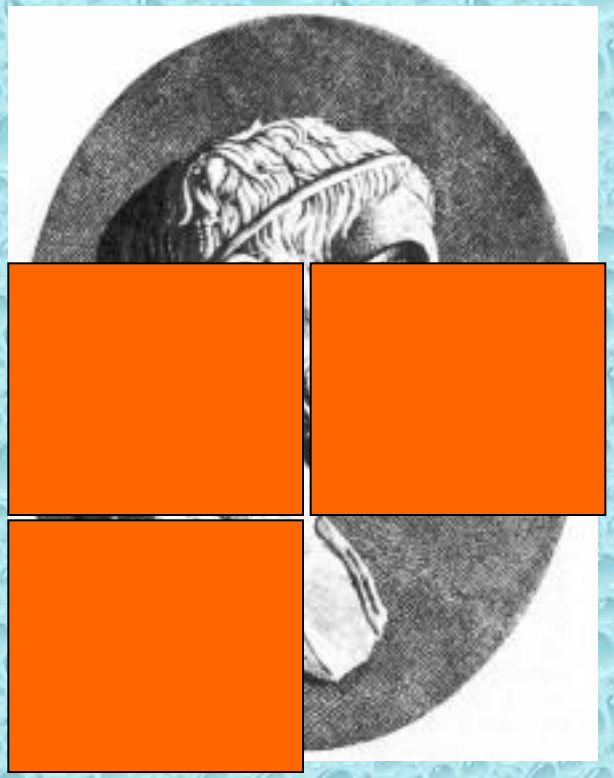
12	9
3	276
36	63
24	55

УЗНАЁТЕ ?



36

ИТАК, КТО ЖЕ ЭТО?



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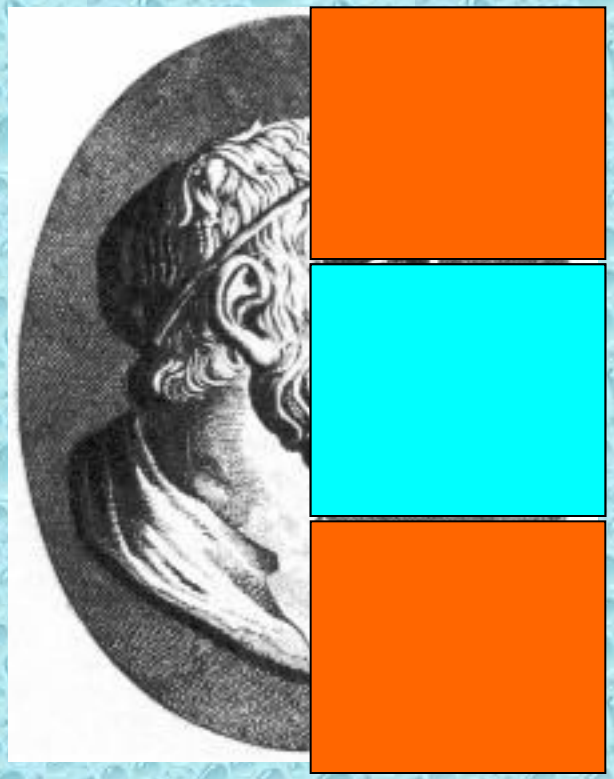
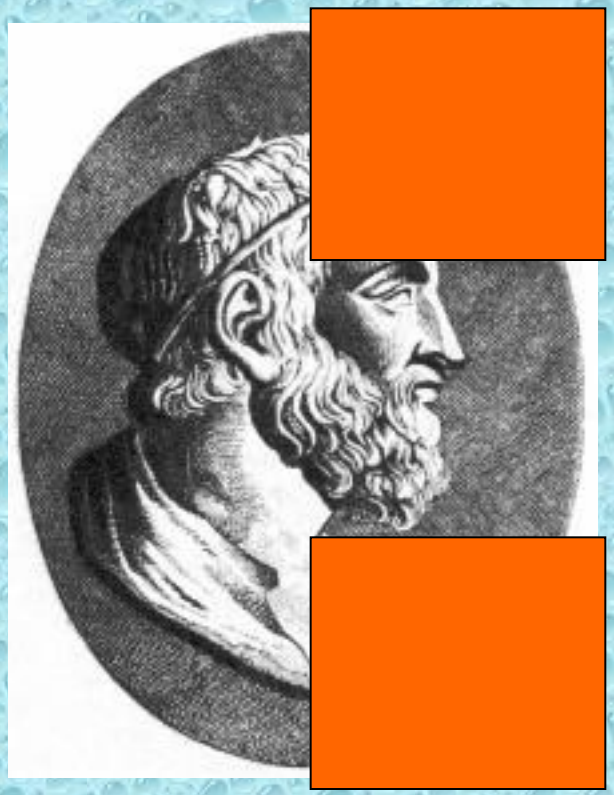
НОК (12 ; 9) ?.?.



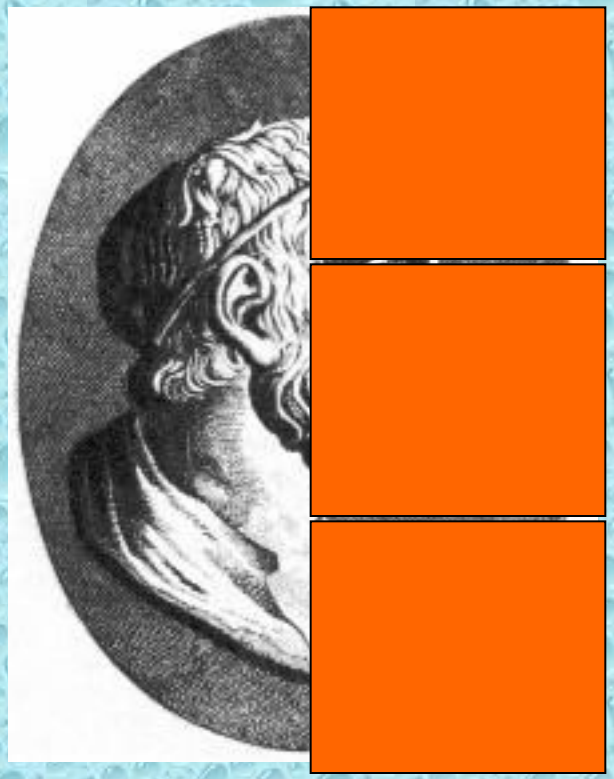
12	9
3	276
36	63
24	55

МОЖНО УЗНАТЬ ?



36

УЗНАТЬ НЕРЕАЛЬНО?



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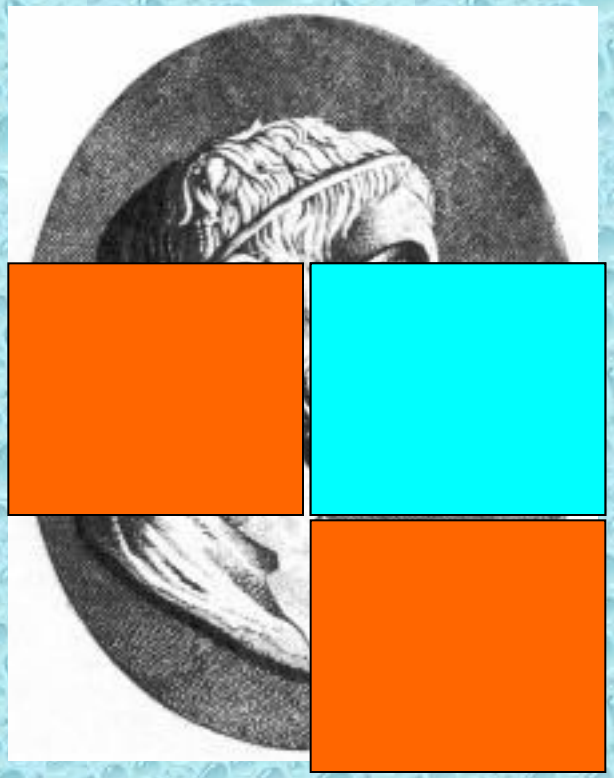
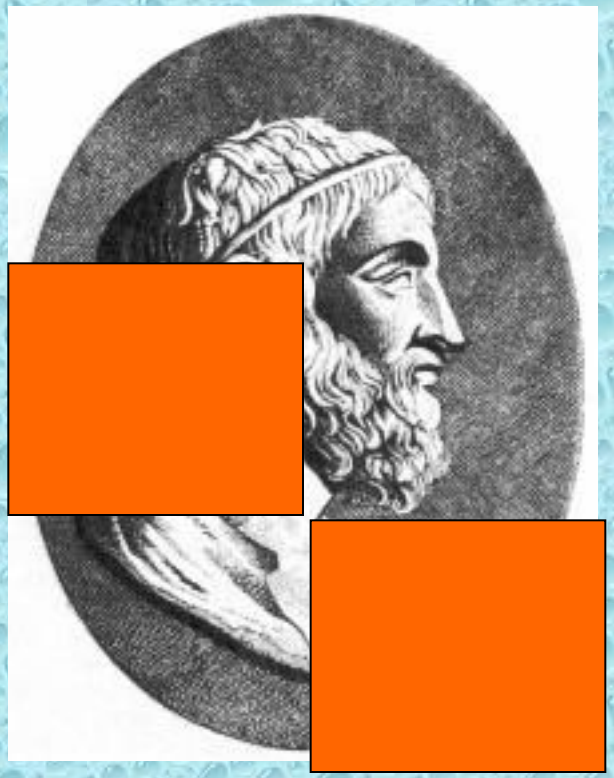
НОК (12 ; 9) ?.?.?



12	9
3	276
36	63
24	55

ПОПРОБУЙТЕ УЗНАТЬ.



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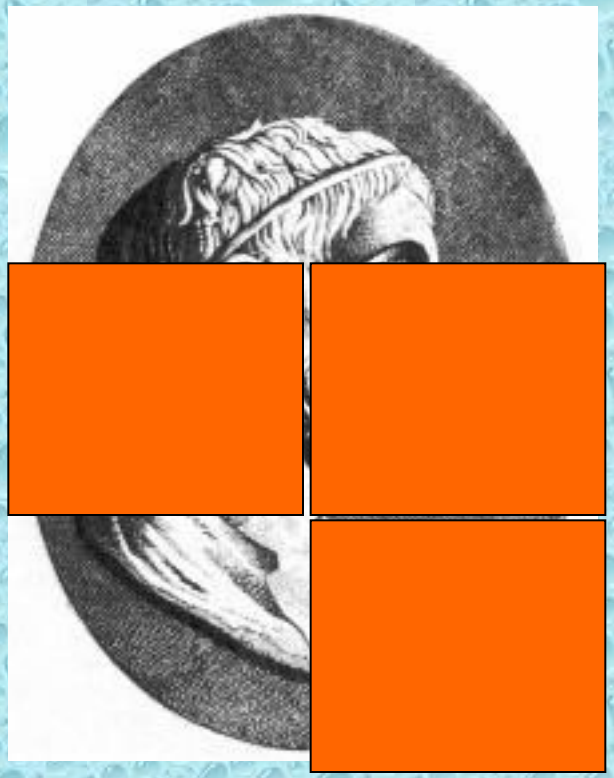
...



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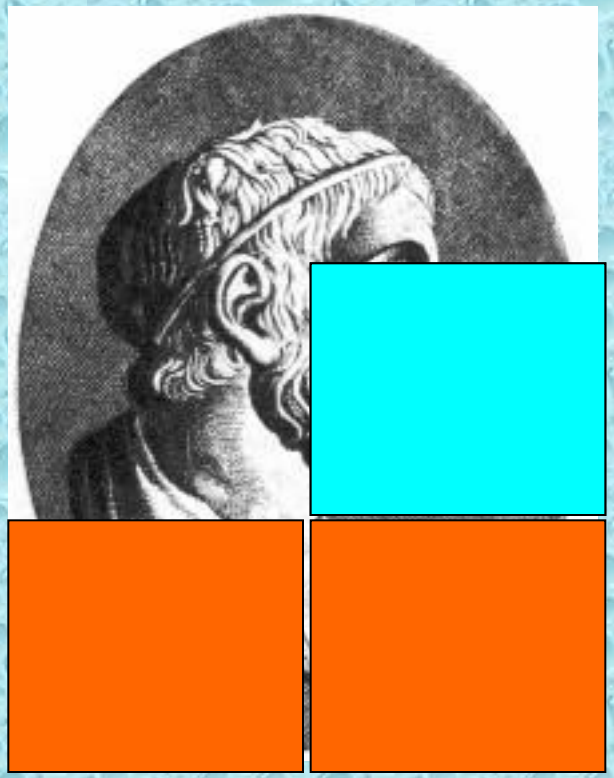
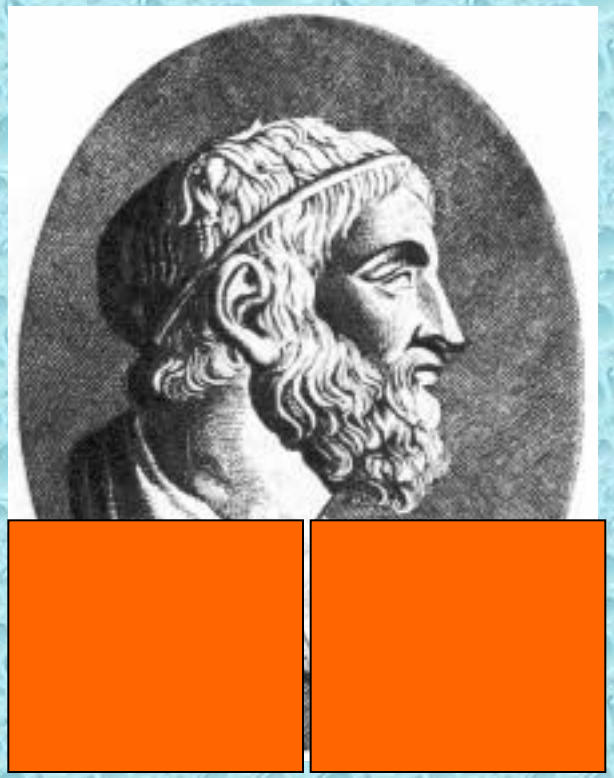
НОК (12 ; 9)



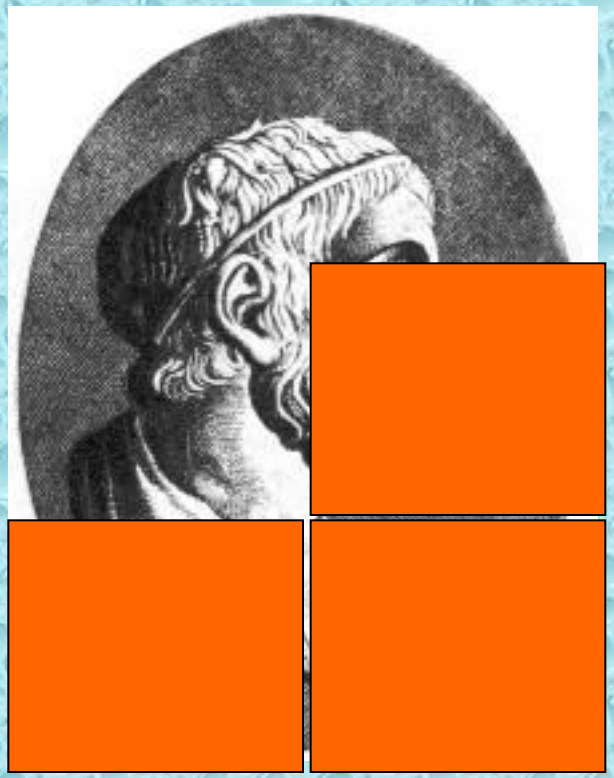
12	9
3	276
36	63
24	55

ПРАВИЛЬНОЕ РЕШЕНИЕ.



36

НУ И КТО ЖЕ ЭТО?



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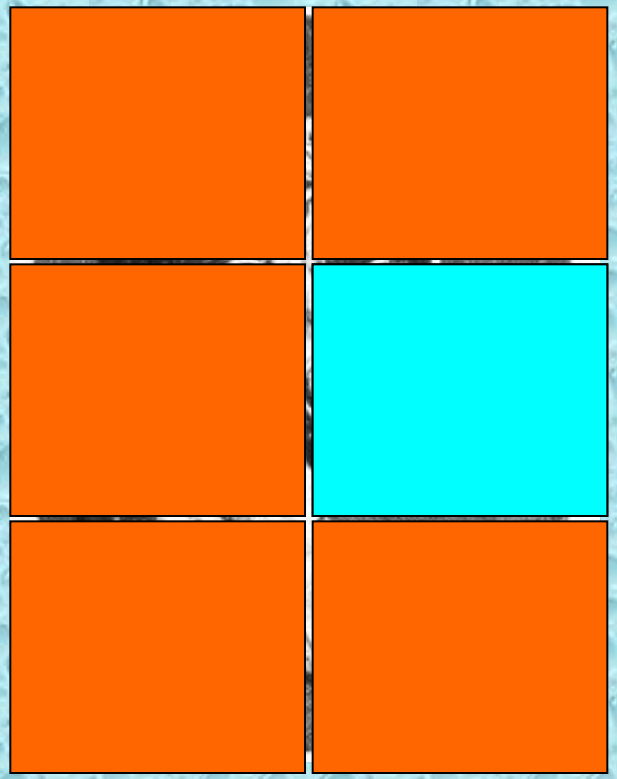
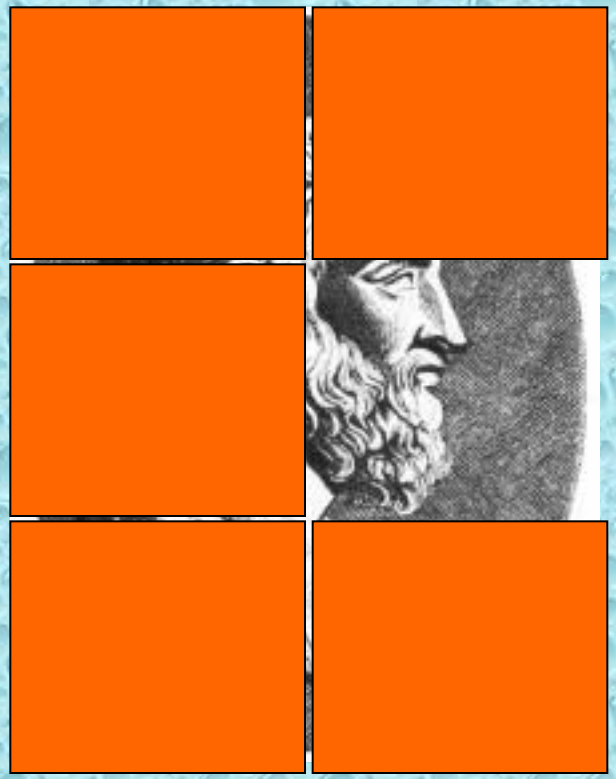
НОК (12 ; 9) …….



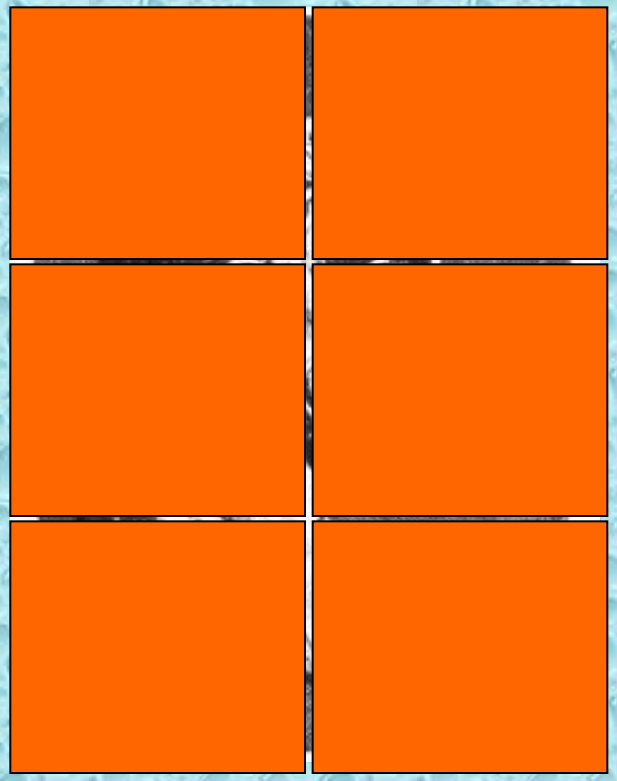
12	9
3	276
36	63
24	55

У ВАС ЕСТЬ ШАНС.



36

ДОГАДАЛИСЬ?



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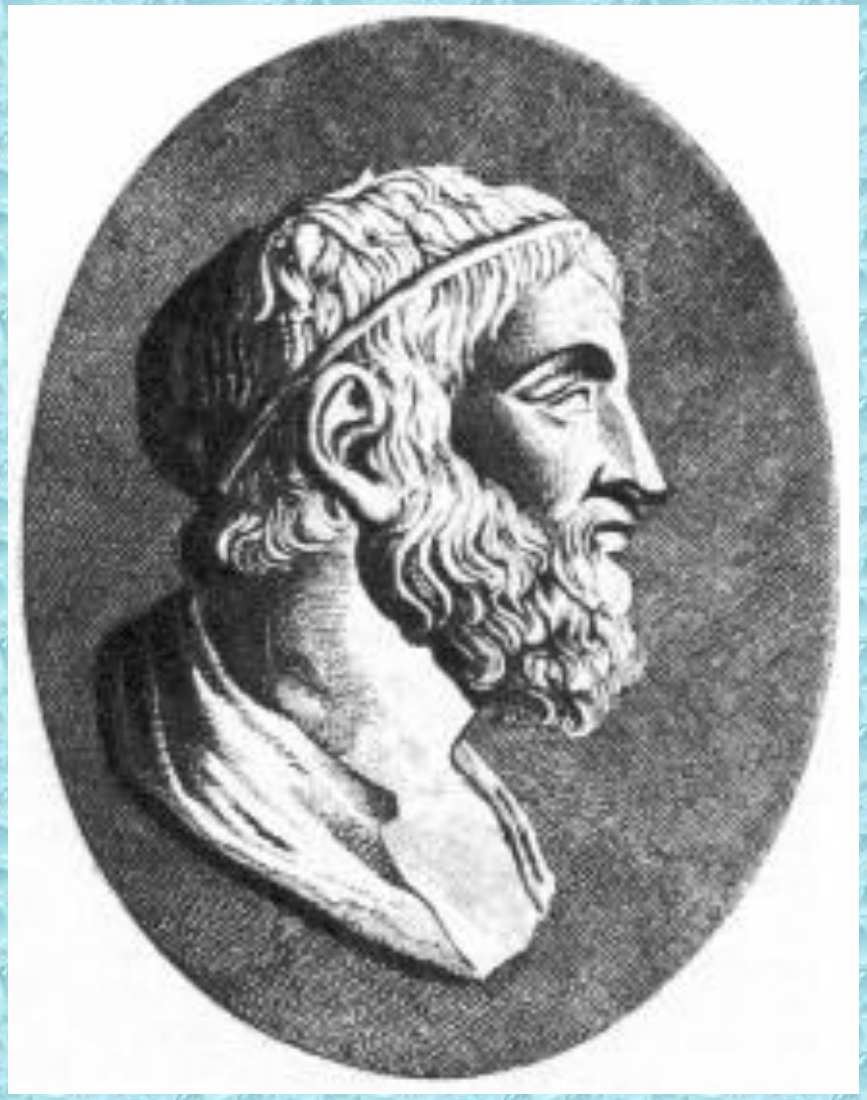
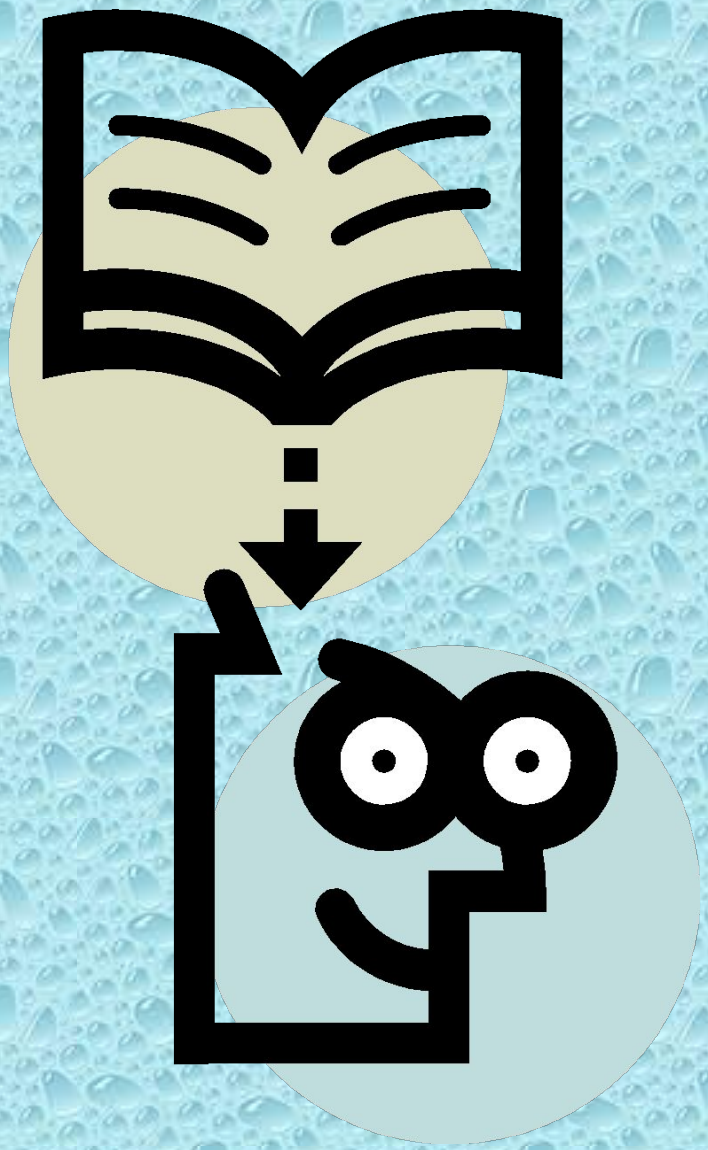


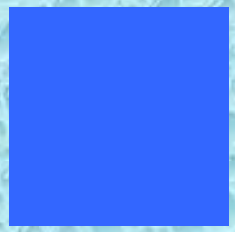


ЗАДАНИЕ 3

$$\frac{7 \bullet 3}{8 \bullet 3}$$

ЗАДАНИЕ 3

$$\frac{7 \bullet 3}{8 \bullet 3} \qquad \frac{7}{8}$$



ЗАДАНИЕ 3

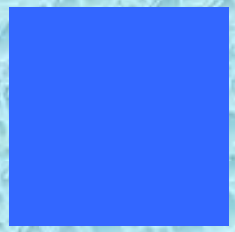
$$\frac{7 \bullet 3}{8 \bullet 3} \qquad \frac{7 \bullet 5}{8 \bullet 5}$$

ЗАДАНИЕ 3

$$\frac{7 \bullet 3}{8 \bullet 3} \quad \_ \quad \frac{7 \bullet 5}{8 \bullet 5}$$

ЗАДАНИЕ 3

$$\frac{7 \bullet 3}{8 \bullet 3} - \frac{7 \bullet 5}{8 \bullet 5} = ?$$



ЗАДАНИЕ 3

$$\frac{7 \bullet 3}{8 \bullet 3} - \frac{7 \bullet 5}{8 \bullet 5} = 0$$

$$\frac{a}{b} = \frac{a \cdot c}{b \cdot c}, c \neq 0$$

$$\frac{a}{b} = \frac{a \cdot c}{b \cdot c}, c \neq 0$$

приведение дробей к общему знаменателю

$$\frac{a}{b} = \frac{a \cdot c}{b \cdot c}, c \neq 0$$

приведение дробей к общему знаменателю

сравнение дробей с общим знаменателем

$$\frac{a}{b} = \frac{a \cdot c}{b \cdot c}, c \neq 0$$

приведение дробей к общему знаменателю

сравнение дробей с общим знаменателем

сравнение дробей с одинаковым числителем

$$\frac{a}{b} = \frac{a \cdot c}{b \cdot c}, c \neq 0$$

приведение дробей к общему знаменателю

сравнение дробей с общим знаменателем

приведение дробей к одинаковому числителю

сравнение дробей с одинаковым числителем

Частные приемы сравнения обыкновенных дробей

Что делать?	Условие	Примеры
1.		
2.		
3.		
4.		

Частные приемы сравнения обыкновенных дробей

Что делать?	Условие	Примеры
1.		$\frac{7}{9}$ и $\frac{16}{15}$; $\frac{39}{37}$ и $\frac{91}{95}$; $\frac{120}{123}$ и $\frac{88}{85}$.
2.		
3.		
4.		

Частные приемы сравнения обыкновенных дробей

Что делать?	Условие	Примеры
1.		$\frac{7}{9}\ и\ \frac{16}{15};\ \frac{39}{37}\ и\ \frac{91}{95};\ \frac{120}{123}\ и\ \frac{88}{85}.$
2.		$\frac{15}{19}\ и\ \frac{3}{8};\ \frac{33}{67}\ и\ \frac{23}{45};\ \frac{5}{7}\ и\ \frac{4}{9}.$
3.		
4.		

Частные приемы сравнения обыкновенных дробей

Что делать?	Условие	Примеры
1.		$\frac{7}{9}$ и $\frac{16}{15}$; $\frac{39}{37}$ и $\frac{91}{95}$; $\frac{120}{123}$ и $\frac{88}{85}$.
2.		$\frac{15}{19}$ и $\frac{3}{8}$; $\frac{33}{67}$ и $\frac{23}{45}$; $\frac{5}{7}$ и $\frac{4}{9}$.
3.		$\frac{18}{19}$ и $\frac{5}{6}$; $\frac{20}{21}$ и $\frac{17}{18}$; $\frac{37}{39}$ и $\frac{93}{95}$.
4.		

Частные приемы сравнения обыкновенных дробей

Что делать?	Условие	Примеры
1. Сравнить с единицей	$\frac{a}{b}\langle 1; \frac{c}{d}\rangle 1$.	$\frac{7}{9}\langle\frac{16}{15};\frac{39}{37}\rangle\frac{91}{95};\frac{120}{123}\langle\frac{88}{85}$.
2.		$\frac{15}{19}\,и\,\frac{3}{8};\frac{33}{67}\,и\,\frac{23}{45};\frac{5}{7}\,и\,\frac{4}{9}$.
3.		$\frac{18}{19}\,и\,\frac{5}{6};\frac{20}{21}\,и\,\frac{17}{18};\frac{37}{39}\,и\,\frac{93}{95}$.
4.		

Частные приемы сравнения обыкновенных дробей

Что делать?	Условие	Примеры
1. Сравнить с единицей	$\frac{a}{b}\langle 1; \frac{c}{d}\rangle 1.$	$\frac{7}{9}\langle\frac{16}{15}; \frac{39}{37}\rangle\frac{91}{95}; \frac{120}{123}\langle\frac{88}{85}.$
2.Сравнить с ½	$\frac{a}{b}\langle\frac{1}{2}; \frac{c}{d}\rangle\frac{1}{2}.$	$\frac{15}{19}\rangle\frac{3}{8}; \frac{33}{67}\langle\frac{23}{45}; \frac{5}{7}\rangle\frac{4}{9}.$
3.		$\frac{18}{19}\,и\,\frac{5}{6}; \frac{20}{21}\,и\,\frac{17}{18}; \frac{37}{39}\,и\,\frac{93}{95}.$
4.		

Частные приемы сравнения обыкновенных дробей

Что делать?	Условие	Примеры
1. Сравнить с единицей	$\frac{a}{b}\langle 1; \frac{c}{d}\rangle 1$.	$\frac{7}{9}\langle\frac{16}{15}; \frac{39}{37}\rangle\frac{91}{95}; \frac{120}{123}\langle\frac{88}{85}$.
2.Сравнить с ½	$\frac{a}{b}\langle\frac{1}{2}; \frac{c}{d}\rangle\frac{1}{2}$.	$\frac{15}{19}\rangle\frac{3}{8}; \frac{33}{67}\langle\frac{23}{45}; \frac{5}{7}\rangle\frac{4}{9}$.
3. Определить близость к 1	$b-a=d-c$	$\frac{18}{19}\rangle\frac{5}{6}; \frac{20}{21}\rangle\frac{17}{18}; \frac{37}{39}\langle\frac{93}{95}$.
4.		

Частные приемы сравнения обыкновенных дробей

Что делать?	Условие	Примеры
1. Сравнить с единицей	$\frac{a}{b}\langle 1;\frac{c}{d}\rangle 1.$	$\frac{7}{9}\langle\frac{16}{15};\frac{39}{37}\rangle\frac{91}{95};\frac{120}{123}\langle\frac{88}{85}.$
2.Сравнить с ½	$\frac{a}{b}\langle\frac{1}{2};\frac{c}{d}\rangle\frac{1}{2}.$	$\frac{15}{19}\rangle\frac{3}{8};\frac{33}{67}\langle\frac{23}{45};\frac{5}{7}\rangle\frac{4}{9}.$
3. Определить близость к 1	$b-a=d-c$	$\frac{18}{19}\rangle\frac{5}{6};\frac{20}{21}\rangle\frac{17}{18};\frac{37}{39}\langle\frac{93}{95}.$
4. Общее правило	$a\cdot d\langle c\cdot b, mo$ $\frac{a}{b}\langle\frac{c}{d}$	$\frac{8}{25}u\frac{4}{11};8\cdot 11u4\cdot 25.$

Частные приемы сравнения обыкновенных дробей

Что делать?	Условие	Примеры
1. Сравнить с единицей	$\frac{a}{b}\langle 1;\frac{c}{d}\rangle 1.$	$\frac{7}{9}\langle\frac{16}{15};\frac{39}{37}\rangle\frac{91}{95};\frac{120}{123}\langle\frac{88}{85}.$
2.Сравнить с ½	$\frac{a}{b}\langle\frac{1}{2};\frac{c}{d}\rangle\frac{1}{2}.$	$\frac{15}{19}\rangle\frac{3}{8};\frac{33}{67}\langle\frac{23}{45};\frac{5}{7}\rangle\frac{4}{9}.$
3. Определить близость к 1	$b-a=d-c$	$\frac{18}{19}\rangle\frac{5}{6};\frac{20}{21}\rangle\frac{17}{18};\frac{37}{39}\langle\frac{93}{95}.$
4. Общее правило	$a\cdot d\langle c\cdot b, mo$ $\frac{a}{b}\langle\frac{c}{d}$	$\frac{8}{25}u\frac{4}{11};8\cdot 11\langle 4\cdot 25.$

Частные приемы сравнения обыкновенных дробей

Что делать?	Условие	Примеры
1. Сравнить с единицей	$\frac{a}{b}\langle 1;\frac{c}{d}\rangle 1.$	$\frac{7}{9}\langle\frac{16}{15};\frac{39}{37}\rangle\frac{91}{95};\frac{120}{123}\langle\frac{88}{85}.$
2.Сравнить с ½	$\frac{a}{b}\langle\frac{1}{2};\frac{c}{d}\rangle\frac{1}{2}.$	$\frac{15}{19}\rangle\frac{3}{8};\frac{33}{67}\langle\frac{23}{45};\frac{5}{7}\rangle\frac{4}{9}.$
3. Определить близость к 1	$b-a=d-c$	$\frac{18}{19}\rangle\frac{5}{6};\frac{20}{21}\rangle\frac{17}{18};\frac{37}{39}\langle\frac{93}{95}.$
4. Общее правило	$a\cdot d\langle c\cdot b, mo$ $\frac{a}{b}\langle\frac{c}{d}$	$\frac{8}{25}\langle\frac{4}{11};8\cdot 11\langle 4\cdot 25.$

ЗАДАНИЕ 4

Сравнить дроби наиболее удобным способом:

1) $\frac{13}{25} \text{ и } \frac{27}{50}$;

2) $\frac{15}{77} \text{ и } \frac{10}{33}$;

3) $\frac{6}{59} \text{ и } \frac{3}{29}$;

4) $\frac{19}{7} \text{ и } \frac{7}{19}$;

5) $\frac{35}{36} \text{ и } \frac{36}{37}$;

6) $\frac{9}{11} \text{ и } \frac{5}{7}$.

ЗАДАНИЕ 4

Проверка полученных результатов:

1) $\frac{13}{25} < \frac{27}{50}$;

2) $\frac{15}{77} < \frac{10}{33}$;

3) $\frac{6}{59} < \frac{3}{29}$;

4) $\frac{19}{7} > \frac{7}{19}$;

5) $\frac{35}{36} < \frac{36}{37}$;

6) $\frac{9}{11} > \frac{5}{7}$.