

# Division of 123456789 by 3

1/3	2/3
1/3 > 3+1	2/3 > 6+2

Rules of division by 3

1 2 3 4 5 6 7 8 9 0 0 0 3	
A B C D E F G H I J K L M	

3 3 3 4 5 6 7 8 9 0 0 0 3	Column A: rule 1/3 > 3+1
	Change 1 in A into 3, add 1 to B
A B C D E F G H I J K L M	

4 0 3 4 5 6 7 8 9 0 0 0 3	Revise up A
	Add 1 to A, subtract 3 from B
A B C D E F G H I J K L M	

<p>4 1 0 4 5 6 7 8 9 0 0 0 3</p> <p>A B C D E F G H I J K L M</p>	<p>Revise up B</p> <p>Add 1 to B, subtract 3 from C</p>
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<p>4 1 1 1 5 6 7 8 9 0 0 0 3</p> <p>A B C D E F G H I J K L M</p>	<p>Revise up C</p> <p>Add 1 to C, subtract 3 from D</p>
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<p>4 1 1 3 6 6 7 8 9 0 0 0 3</p> <p>A B C D E F G H I J K L M</p>	<p>Column D: rule <math>1/3 &gt; 3+1</math></p> <p>Change 1 in D into 3, add 1 to E</p>
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<p>4 1 1 5 0 6 7 8 9 0 0 0 3</p> <p>A B C D E F G H I J K L M</p>	<p>Revise up D twice</p> <p>Add 2 to D, subtract 6 from E</p>
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<p>4 1 1 5 2 0 7 8 9 0 0 0 3</p> <p>A B C D E F G H I J K L M</p>	<p>Revise up E twice</p> <p>Add 2 to E, subtract 6 from F</p>
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<p>4 1 1 5 2 2 1 8 9 0 0 0 3</p> <p>A B C D E F G H I J K L M</p>	<p>Revise up F twice</p> <p>Add 2 to F, subtract 6 from G</p>
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<p>4 1 1 5 2 2 3 9 9 0 0 0 3</p> <p>A B C D E F G H I J K L M</p>	<p>Column G: rule <math>1/3 &gt; 3+1</math></p> <p>Change 1 in G into 3, add 1 to H</p>
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<p>4 1 1 5 2 2 6 0 9 0 0 0 3</p> <p>A B C D E F G H I J K L M</p>	<p>Revise up G three times</p> <p>Add 3 to G, subtract 9 from H</p>
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4	1	1	5	2	2	6	3	0	0	0	0	3
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A	B	C	D	E	F	G	H	I	J	K	L	M

Revise up H three times

Add 3 to H, subtract 9 from I

Done!  
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