MathFLIX CHALLENGE
Tricks for Finding Multiples of 3 and 4

TRICK 1: Any number is divisible by 3 if the sum of the digits in the number is divisible by 3. Look at these examples:

$21 \div 3 = 7$ → and $2 + 1 = 3$

$102 \div 3 = 34$ → and $1 + 0 + 2 = 3$

$918 \div 3 = 306$ → and $9 + 1 + 8 = 18$ → $18 \div 6 = 3$

Use this trick to complete the table below

Number	Sum of digits	Divisible by 3	Number	Sum of digits	Divisible by 3
24	2+4=6	yes	217		
28	2+8=10	no	356		
39	3+9=12		413		
48			812		
57			6,131		
69			10,156		
116			12,031		

TRICK 2: Any number is divisible by 4 if the last two digits of the number are divisible by 4. Look at these examples:

$1\mathbf{20} \div 4 = 30$ → and $\mathbf{20} \div 4 = 5$

$10,\mathbf{164} \div 4 = 291$ → and $\mathbf{64} \div 4 = 16$

Use this trick to complete the table below

Number	Last 2 digits	Divisible by 4	Number	Last 2 digits	Divisible by 4
16	16	yes	2,216	16	no
28	28	no	4,340		
39			21,024		
48			23,658		
57			104,112		
69			2,084,880		
116			5,102,804		