



DIVISIBILITY RULES

★ FROM 2 TO 20 ★



EASY TRICKS • QUICK CHECKS • SMART MATHS

NUMBER	DIVISIBILITY RULE	HOW TO CHECK?	EXAMPLE
2	EVEN A number is divisible by 2 if its last digit is even.	Check if the last digit is 0, 2, 4, 6, or 8.	248 ✓ (Last digit is 8)
3	Σ A number is divisible by 3 if the sum of its digits is divisible by 3.	Add all digits. If the sum is divisible by 3, the number is divisible by 3.	531 ✓ (5+3+1 = 9)
4	LAST 2 DIGITS A number is divisible by 4 if its last two digits are divisible by 4.	Check the last two digits. They should be divisible by 4.	716 ✓ (Last two digits 16)
5	0 or 5 A number is divisible by 5 if it ends in 0 or 5.	Check the last digit. It should be 0 or 5.	245 ✓ (Ends in 5)
6	2 & 3 A number is divisible by 6 if it is divisible by both 2 and 3.	Last digit even AND sum of digits divisible by 3.	318 ✓ (Even and 3+1+8=12)
7	2xLAST DIGIT A number is divisible by 7 using the double and subtract rule.	Double the last digit and subtract from the remaining number. Repeat if needed.	203 ✓ $20 - (2 \times 3) = 14 (\div 7)$
8	LAST 3 DIGITS A number is divisible by 8 if its last three digits are divisible by 8.	Check the last three digits. They should be divisible by 8.	4216 ✓ (Last three digits 216)
9	Σ A number is divisible by 9 if the sum of its digits is divisible by 9.	Add all digits. If the sum is divisible by 9, the number is divisible by 9.	729 ✓ (7+2+9=18)
10	0 A number is divisible by 10 if it ends in 0.	Check the last digit. It should be 0.	560 ✓ (Ends in 0)
11	ALT SUM A number is divisible by 11 if the difference of alternating digit sums is 0 or a multiple of 11.	Find the sum of digits in odd places and even places. If the difference is 0 or 11 (or multiple of 11).	121 ✓ $(1+1) - (2) = 0$
12	3 & 4 A number is divisible by 12 if it is divisible by both 3 and 4.	Sum of digits $\div 3$ AND last two digits $\div 4$.	324 ✓ (3+2+4=9 and 24 $\div 4$)
13	x4 + A number is divisible by 13 using the multiplication rule.	Multiply the last digit by 4 and add to the remaining number. Repeat if needed.	351 ✓ $35 + (1 \times 4) = 39 (\div 13)$
14	2 & 7 A number is divisible by 14 if it is divisible by both 2 and 7.	Last digit even AND divisible by 7.	686 ✓ (Even and $\div 7$)
15	3 & 5 A number is divisible by 15 if it is divisible by both 3 and 5.	Sum of digits $\div 3$ AND ends in 0 or 5.	345 ✓ (3+4+5=12 and ends in 5)
16	LAST 4 DIGITS A number is divisible by 16 if its last four digits are divisible by 16.	Check the last four digits. They should be divisible by 16.	8192 ✓ (Last four digits 8192)
17	— No simple rule. Use direct division.	Divide the number by 17. If remainder is 0, it is divisible by 17.	289 ✓ (289 $\div 17 = 17$)
18	2 & 9 A number is divisible by 18 if it is divisible by both 2 and 9.	Last digit even AND sum of digits $\div 9$.	378 ✓ (Even and 3+7+8=18)
19	— No simple rule. Use direct division.	Divide the number by 19. If remainder is 0, it is divisible by 19.	247 ✓ (247 $\div 19 = 13$)
20	0 & LAST 2 A number is divisible by 20 if it ends in 0 and its last two digits are divisible by 20.	Check last digit is 0 AND last two digits are divisible by 20.	640 ✓ (Last two digits 40)



SMART TIPS

- Check small rules first (2, 3, 5, 9, 10).
- For big numbers, use combined rules.
- Practice regularly to become faster!



KEY REMINDERS

- ✓ Rules save time and reduce mistakes.
- ✓ Use tricks to speed up calculations.
- ✓ Practice more, score higher!



REMEMBER

Divisibility rules are the shortcuts to smart mathematics!



DIVISIBILITY RULES

FROM 2 TO 20

EASY TRICKS • QUICK CHECKS • SMART MATHS

MEMORIZE ✓
PRACTICE ✓
MASTER ✓

DIVISOR	RULE	EXAMPLE	DIVISOR	RULE	EXAMPLE
2	EVEN LAST DIGIT EVEN A number is divisible by 2 if its last digit is even (0, 2, 4, 6, or 8).	248 ✓ (Last digit is 8)	11	ALT SUM ALTERNATE SUM DIFFERENCE A number is divisible by 11 if the difference between the sums of digits in alternating places is 0 or a multiple of 11.	121 ✓ $(1+1) - (2) = 0$
3	Σ SUM OF DIGITS DIVISIBLE BY 3 A number is divisible by 3 if the sum of its digits is divisible by 3.	531 ✓ $(5+3+1=9)$	12	3 & 4 DIVISIBLE BY 3 AND 4 A number is divisible by 12 if it is divisible by both 3 and 4.	324 ✓ $(3+2+4=9)$ and $24 \div 4$
4	LAST 2 DIGITS LAST TWO DIGITS DIVISIBLE BY 4 A number is divisible by 4 if its last two digits form a number divisible by 4.	716 ✓ (Last two digits 16)	13	x4 + MULTIPLY LAST DIGIT BY 4 Multiply the last digit by 4 and add to the remaining number. Repeat if needed. If result is divisible by 13, original number is divisible by 13.	351 ✓ $35 + (1 \times 4) = 39$ $(\div 13)$
5	0 or 5 ENDS IN 0 OR 5 A number is divisible by 5 if it ends in 0 or 5.	245 ✓ (Ends in 5)	14	2 & 7 DIVISIBLE BY 2 AND 7 A number is divisible by 14 if it is divisible by both 2 and 7.	686 ✓ (Even and $\div 7$)
6	2 & 3 DIVISIBLE BY 2 AND 3 A number is divisible by 6 if it is divisible by both 2 and 3.	318 ✓ (Even and $3+1+8=12$)	15	3 & 5 DIVISIBLE BY 3 AND 5 A number is divisible by 15 if it is divisible by both 3 and 5.	345 ✓ $(3+4+5=12)$ and ends in 5)
7	2xLAST DIGIT DOUBLE & SUBTRACT Double the last digit and subtract from the remaining number. Repeat if needed. If result is divisible by 7, original number is divisible by 7.	203 ✓ $20 - (2 \times 3) = 14$ $(\div 7)$	16	LAST 4 DIGITS LAST FOUR DIGITS DIVISIBLE BY 16 A number is divisible by 16 if its last four digits form a number divisible by 16.	8192 ✓ (Last four digits 8192)
8	LAST 3 DIGITS LAST THREE DIGITS DIVISIBLE BY 8 A number is divisible by 8 if its last three digits form a number divisible by 8.	4216 ✓ (Last three digits 216)	17	÷17 DIRECT DIVISION No simple rule. Use direct division.	289 ✓ $(289 \div 17 = 17)$
9	Σ SUM OF DIGITS DIVISIBLE BY 9 A number is divisible by 9 if the sum of its digits is divisible by 9.	729 ✓ $(7+2+9=18)$	18	2 & 9 DIVISIBLE BY 2 AND 9 A number is divisible by 18 if it is divisible by both 2 and 9.	378 ✓ (Even and $3+7+8=18$)
10	0 ENDS IN 0 A number is divisible by 10 if it ends in 0.	560 ✓ (Ends in 0)	19	÷19 DIRECT DIVISION No simple rule. Use direct division.	247 ✓ $(247 \div 19 = 13)$
			20	0 & LAST 2 ENDS IN 0 & LAST TWO DIGITS DIVISIBLE BY 20 A number is divisible by 20 if it ends in 0 and its last two digits are divisible by 20.	640 ✓ (Last two digits 40)

MEMORY TIPS

- Even last digit → 2
- Sum of digits → 3, 9
- Last two digits → 4
- Ends in 0 or 5 → 5, 10
- Combine small rules for bigger numbers!



USES

- Fast Calculations
- Number Patterns
- Factors, HCF & LCM
- Competitive Exams
- Daily Life Problems



REMEMBER

Practice regularly to become faster and smarter in Maths!



PRACTICE TODAY, SCORE TOMORROW!