

Divisibility Rules Worksheet

Using divisibility rules, work out whether each of the below numbers are divisible, you can show your workings in the blank box if you like.

Is...	Divisible by...	Show Your Working Out Here...	Yes/No
123,910	2		Yes/No
812,102	3		Yes/No
81,122	4		Yes/No
6,965	5		Yes/No
2,219	6		Yes/No
672	7		Yes/No
40,264	8		Yes/No
63,891	9		Yes/No
102,982	10		Yes/No
283,102	11		Yes/No
45,800	12		Yes/No
4,092	13		Yes/No
2,668	14		Yes/No
10,430	15		Yes/No

Divisibility Rules Worksheet (Answers)

Is...	Divisible by...	Show Your Working Out Here...	Yes/No
123,910	2	123,910 - the last digit is even, so the number is even.	Yes
812,102	3	$8+1+2+1+0+2=15$ and $15\div 3=5$ 15 is divisible by 3.	Yes
81,122	4	81,122 22 is not divisible by 4, or even when halved.	No
6,965	5	6,965 – the last digit is 5 or 0.	Yes
2,220	6	2,240 – the number is even so is divisible by 2 $2+2+4+0=8$ The sum of the number is not divisible by 3	No
672	7	Double the last digit = 4 $67-4=63$ and $63\div 7=9$ 63 is divisible by 7.	Yes
40,264	8	$264\div 2=132$ Divisible by 4 test - $32\div 2=16$ 16 is even.	Yes
63,891	9	$6+3+8+9+1=27$ $27\div 9=3$ 27 is divisible by 9.	Yes
102,982	10	102,982 – last digit is not 0.	No
283,102	11	$2-8+3-1+0-2 = -6$ -6 is not divisible by 11.	No
7,740	12	$7+7+4+0=18$ – it is divisible by 3 7,740 – the last two digits are divisible by 4	Yes
4,092	13	$409+2\cdot 4=417$ $41+7\cdot 2=55$ 55 is not divisible by 13.	No
2,668	14	$266+8\cdot 2=282$ $28+2\cdot 2=32$ 32 is not divisible by 7	No
10,430	15	10,430 – it is divisible by 5 $1+0+4+3+0=8$ – it is not divisible by 3	No