

Divisibility rules

If a number is divisible by

2: The last digit is 0, 2, 4, 6, and 8

3: The sum of all digits is divisible by 3

4: The last two digits are 00 or are divisible by 4

5: The last digit is either 5 or 0

6: The number is divisible by BOTH 2 and 3

7: The difference between twice the last digit and the remaining number is divisible by 7

8: The last three digits are 000 or are divisible by 8

9: The sum of all digits is divisible by 9

10: The last digit is 0

11: The difference between the sums of alternate digits is 0 or a multiple of 11

12: The number is divisible by BOTH 3 and 4

$$\frac{346}{2} = 173$$

$$\frac{245}{2} = 122.5$$

$$346 \quad 3+4+6=13 \times$$

$$3462 \quad 3+4+6+2=15 \checkmark$$

$$\frac{3462}{3} = 1154$$

$$(346) \times 46 \times (112) \checkmark$$

$$13004 = 325$$

$$346 \times$$

$$325 \checkmark$$

$$3462 \times 6 \checkmark$$

$$3462 \times 6 \checkmark$$

$$346$$

$$\begin{array}{r} 346 \\ -12 \\ \hline 22 \times \end{array}$$

$$\begin{array}{r} 336 \checkmark \\ -12 \\ \hline 21 \checkmark \end{array}$$

$$3816 \checkmark$$

$$(2124) = 9 \checkmark$$

$$3460 \checkmark$$

$$9 \quad 11-9=2$$

$$(3467) \times$$

$$\begin{array}{r} 34672 \checkmark \\ -11 \\ \hline 3152 \end{array}$$

$$3152$$

$$34672$$

$$22 \times$$

$$(34574) = 3 \checkmark$$

$$12 \checkmark$$