

## Divisibility Tricks

There are a number of shortcuts to find out if a number divides by something quickly:

**Does it end in a 0?** It divides by 10: *get rid of the final 0.*

Eg: 3420 divides by 10.  $3420 \div 10 = 342$

**Does it end in a 0 or 5?** It divides by 5: *double it, then divide by 10.*

Eg: 85 divides by 5.  $85 \div 5 = 17$

**Does it end in a 0, 2, 4, 6 or 8?** It divides by 2: *halve it.*

Eg: 342 divides by 2.  $342 \div 2 = 171$

**Do the digits add up to a multiple of 3?** It divides by 3: *use the bus stop method.*

Eg: 456 divides by 3 since  $4 + 5 + 6 = 15$ .  $456 \div 3 = 152$

If you don't know what a number divides by, first check it quickly using the rules above.

*If your number doesn't divide by 2 or 3 or 5, it won't divide by numbers made from 2, 3 or 5 either (like 6 or 8 or 9), so the next one to try is 7. There's no easy trick for 7, so just use the bus stop method or check with a calculator. If you get an exact answer with no remainder, 7 is a factor.*

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