

**How to halve any number.** Any number at all, even funny looking ones. As we know  $\frac{1}{2}$  has many names, like 0.5, 50 %, any equivalent fraction, or  $\div 2$ . In fact knowing that **halving is the same as dividing by 2** is very useful for the strategy we're learning today.

OK, you've done this before! Easily the most efficient way to divide big numbers by 2 is to use the fast long division standard form shown below. Once you have practiced and mastered this method you are set, and the whole world (of halving) is open to you! Try halving 59.2

$$\begin{array}{r} 29.6 \\ 2 \overline{)59.12} \end{array}$$

1. Look at numbers that can be divided by 2, starting on the left. The '5' in the 10s column can fit 2 2s with 1 left over. Put the '2' above on the answer line, and the leftover 1 beside the 9 to make 19
2.  $19 \div 2 = 9 \text{ r}1$  Put the '9' above on the answer line
3. Put the r1 in the 10ths column on the left of the 2, to make '12'
4.  $12 \div 2 = 6$ . Put the '6' in the 10ths place on the answer line – all done! Answer: 29.6

Feeling some deja vu?

Yes, it's very much like the other types of division you know and love – you can use the same idea with any fractions actually. So, let's have a go at chopping some interesting numbers in half. Keep your place value!

a.  $2 \overline{)78.48}$

b.  $2 \overline{)10.37}$

c.  $2 \overline{)456.7}$

d.  $2 \overline{)2.916}$

e.  $2 \overline{)52284}$

f.  $2 \overline{)39663}$

g.  $2 \overline{)4825702}$

h.  $2 \overline{)31.68}$

i.  $2 \overline{)15.17}$

j.  $2 \overline{)65.37}$

k.  $2 \overline{)1.006}$

l.  $2 \overline{)23456}$

m.  $2 \overline{)98765}$

n.  $2 \overline{)1357902}$

o.  $2 \overline{)99.38}$

p.  $2 \overline{)19.17}$

q.  $2 \overline{)372.7}$

r.  $2 \overline{)2.070}$

s.  $2 \overline{)83281}$

t.  $2 \overline{)54463}$

u.  $2 \overline{)5936893}$

v.  $2 \overline{)71.44}$

w.  $2 \overline{)11.77}$

x.  $2 \overline{)678.9}$

y.  $2 \overline{)4.138}$

z.  $2 \overline{)0.0527}$

aa.  $2 \overline{)0.3007}$