Similarly, to divide by 10, 100 or 1000, move the digits one, two or three places to the right.

	1000	100	10	1	•	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$
70			7	0				
70 ÷ 10				7				
70 ÷ 100				0	•	7		
70 ÷ 1000				0	•	0	7	
1502	1	5	0	2				
1502 ÷ 10		1	5	0	•	2		
1502 ÷ 100			1	5	•	0	2	
1502 ÷ 1000				1	•	5	0	2

> If necessary, put zeros into the 'empty' places after the decimal point.

WORKIT!

$0.37 \times 35 = 12.95$

Without using a calculator, work out

a 37×35

> $37 = 100 \times 0.37$, so the answer will be 100 times bigger. Move the digits in 12.95 two places to the left.

$37 \times 35 = 100 \times 0.37 \times 35$

$\qquad = 12.95 \times 100 = 1295$

b 3.7×350

$3.7 \times 350 = 100 \times 0.37 \times 35$

$\qquad = 12.95 \times 100 = 1295$

> $3.7 = 10 \times 0.37$ and $350 = 10 \times 35$, so the answer will be $10 \times 10 = 100$ times bigger.

c $\dfrac{12.95}{350}$

> Divide both sides of the original calculation by 35.

$0.37 = \dfrac{12.95}{35}$
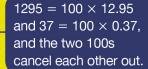
$\dfrac{12.95}{350} = \dfrac{12.95}{35 \times 10} = 0.37 \div 10 = 0.037$

> $350 = 10 \times 35$. Since the 350 is the denominator, the answer will be 10 times smaller.

d $\dfrac{1295}{37}$

$\dfrac{12.95}{0.37} = 35$

$\dfrac{1295}{37} = \dfrac{12.95 \times 100}{0.37 \times 100} = 35$

> $1295 = 100 \times 12.95$ and $37 = 100 \times 0.37$, and the two 100s cancel each other out.

Mathematical symbols

Mathematical symbols save time when writing. You need to remember the following symbols.

SNAPIT! Mathematical symbols

Symbol	Meaning	Example
$=$	is equal to	$x + x = 2x$
$\neq$	is not equal to	$1 + 5 \times 2 \neq 12$
$>$	is greater than	$-3 > -4$
$<$	is less than	$0 < 4$
$\geq$	is greater than or equal to	$x \geq 4$
$\leq$	is less than or equal to	$y \leq 6$

DOIT!

Put each symbol and its meaning on a stickynote and place them around your house to help you remember them.