

Dividing decimal numbers by 10, 100 and 1,000

Dividing by 10

When you divide a decimal number by 10 you move all the digits **one place to the right**. The number becomes 10 times **smaller**.

Example: $3,502 \div 10 = 350.2$

You can see that the digits move along to the right. Thousands move to hundreds, and the others follow like this:

Th	H	T	U		$\frac{1}{10}$	$\frac{1}{100}$
3	5	0	2			
	3	5	0	.	2	

Th = thousands

H = hundreds

T = tens

U = units

Dividing by 100

When you divide a decimal number by 100 you move all the digits **two places to the right**. The number becomes **100 times smaller**.

Example: $3,502 \div 100 = 35.02$

Th	H	T	U		$\frac{1}{10}$	$\frac{1}{100}$
3	5	0	2			
		3	5	.	0	2

Th = thousands

H = hundreds

T = tens

U = units

Dividing by 1,000

When you divide a decimal number by 1,000 you move all the digits **three places to the right**. The number becomes **1,000 times smaller**.

Example: $3,502 \div 1,000 = 3.502$

Th	H	T	U		$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$
3	5	0	2				
			3	.	5	0	2

Th = thousands

H = hundreds

T = tens

U = units