

Multiplying by 10 and 100

NAME:

When we multiply by 10 the digits in a number move 1 place to the left

Thousands			Ones			Parts of one	
H	T	O	H	T	O	tenths	hundredths
H	T	O	H	T	O	t	h
					3	6	
				3	6		

$3.6 \times 10 = 36$

$3.6 \times 10 = 36$

Short cut for decimal numbers – move the decimal one place to the right

$36 \times 10 = 360$

Short cut for whole numbers – add a zero

Thousands			Ones			Parts of one	
H	T	O	H	T	O	tenths	hundredths
H	T	O	H	T	O	t	h
			4	5	0		

$450 \times 10 =$

Thousands			Ones			Parts of one	
H	T	O	H	T	O	tenths	hundredths
H	T	O	H	T	O	t	h
		3	2	0	0		

$3200 \times 10 =$

Thousands			Ones			Parts of one	
H	T	O	H	T	O	tenths	hundredths
H	T	O	H	T	O	t	h
				3	3	7	

$33.7 \times 10 =$

Thousands			Ones			Parts of one	
H	T	O	H	T	O	tenths	hundredths
H	T	O	H	T	O	t	h
					6	3	5

$6.35 \times 10 =$

When we multiply by 100, the digits move 2 places to the left.

Thousands			Ones			Parts of one	
H	T	O	H	T	O	tenths	hundredths
					3	6	
			3	6	0		

3.6 x 100 = 360

$3.6 \times 100 = 360$ **Short cut for decimal numbers** – move the decimal two place to the right

$36 \times 100 = 3600$ **Short cut for whole numbers** – add two zeros

When we multiply by 100, the digits move 2 places to the left.

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When we divide by 10 the digits in a number move 1 place to the right.

36 ÷ 10 = 3.6 Short cut for whole numbers – add 1 decimal place

