

Multiplying and Dividing by 10 and 100 SET 1

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
						t	h
					3	6	
				3	6		

3.6 x 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
						t	h
			3	5	0		

350 x 10 =

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

3300 x 10 =

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

33.5 x 10 =

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

3.35 x 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
						t	h
					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

36×10 **Short cut for whole numbers** – add two zeros

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	
						t	h	
				3	5			$35 \times 100 =$

Thousands			Ones			Parts of one		
H	T	O	H	T	O	tenths	hundredths	
						t	h	
			5	3	0			$530 \times 100 =$

Thousands			Ones			Parts of one		
H	T	O	H	T	O	tenths	hundredths	
						t	h	
					5	3		$5.3 \times 100 =$

Thousands			Ones			Parts of one		
H	T	O	H	T	O	tenths	hundredths	
						t	h	
				5	5	0	3	$55.03 \times 100 =$

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

$36 \div 10 = 3.6$ (Short cut for whole numbers – add 1 decimal place)

