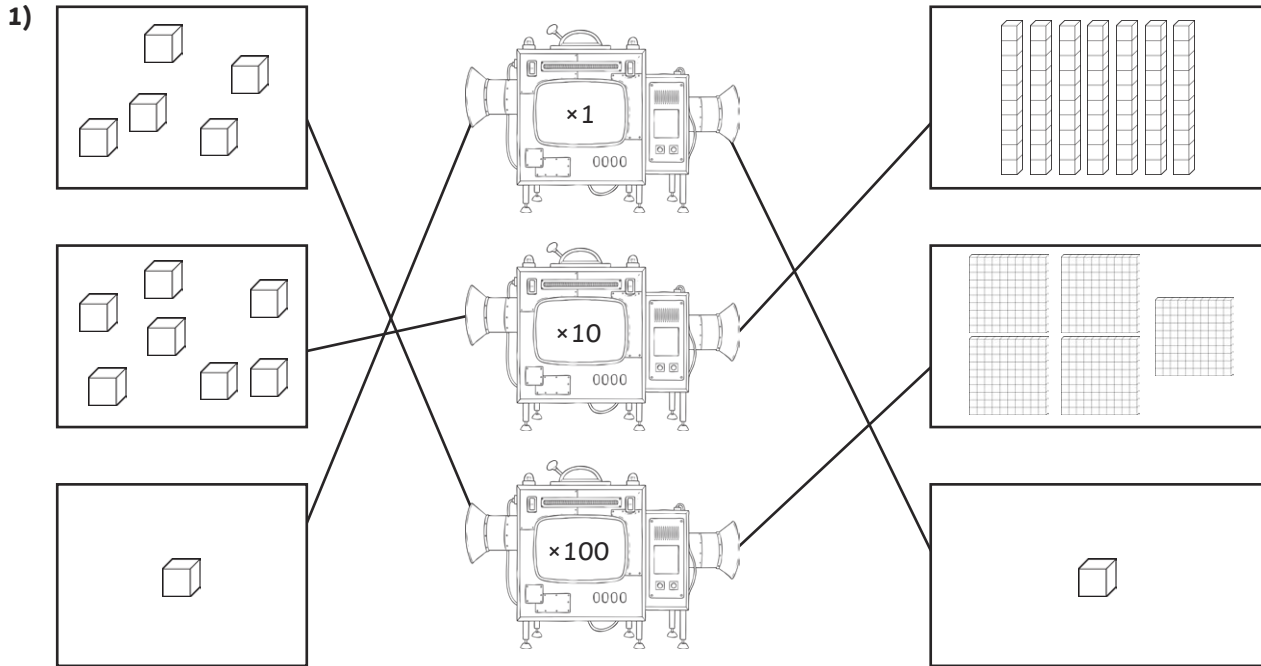




2) a) $8 \times 1 = 8$

H	T	O
		xxxxxxxx

b) $8 \times 10 = 80$

H	T	O
	xxxxxxxx	

c) $8 \times 100 = 800$

H	T	O
xxxxxxxx		

d) $43 \times 1 = 43$

Th	H	T	O
		xxxx	xxx

e) $43 \times 10 = 430$

Th	H	T	O
	xxxx	xxx	

f) $43 \times 100 = 4300$

Th	H	T	O
xxxx	xxx		

g) $81 \times 1 = 81$

Th	H	T	O
		xxxx xxxx	x

h) $81 \times 10 = 810$

Th	H	T	O
	xxxx xxxx	x	

i) $81 \times 100 = 8100$

Th	H	T	O
xxxx xxxx	x		



1)

Name	Representation	Correct or Incorrect?	Explanation																
Artim 	<table><tr><th>Th</th><th>H</th><th>T</th><th>O</th></tr><tr><td></td><td></td><td>3</td><td>4</td></tr><tr><td>3</td><td>4</td><td>0</td><td>0</td></tr></table>	Th	H	T	O			3	4	3	4	0	0	✓	When you multiply a number by 100, each digit becomes 100 times greater which means that it moves up two place value places to the left. 3 tens would become 3 thousands and 4 ones would become 4 hundreds.				
Th	H	T	O																
		3	4																
3	4	0	0																
François 	$34 \times 10 \times 10$	✓	Multiplying by 10 and 10 again is the same as multiplying by 100. $34 \times 10 \times 10 = 34 \times 100$.																
Emily 	<table><tr><th colspan="4">134</th></tr><tr><td>10</td><td>1</td><td>1</td><td>100</td></tr><tr><td>10</td><td>1</td><td></td><td></td></tr><tr><td>10</td><td>1</td><td></td><td></td></tr></table>	134				10	1	1	100	10	1			10	1			✗	Emily is incorrect because she has used addition instead of multiplication. Her image represents $34 + 100$.
134																			
10	1	1	100																
10	1																		
10	1																		

- 2) a) Always. When multiplying by 100 a number will always become hundred times greater than the number you started with. For example, $3 \times 100 = 300$.
- b) Never. If a digit has moved 3 places left on a place value chart, it will have been multiplied by 1000. When multiplying by 100, digits only move two places left on the place value chart.
- c) Sometimes. If you are multiplying a one-digit whole number by 100, this is not true. However, if you are multiplying a number with more than one digit, there is a chance that the hundreds will have a place holder in this column. For example, $20 \times 100 = 2000$.



- 1) $96 \times 100 = 9600$
 $87 \times 100 = 8700$
 $78 \times 100 = 7800$
 $69 \times 100 = 6900$

- 2) The ones digit could be a 0, 2, 4, 6 or 8. In total, there are 7 possible combinations and answers.

$14 \times 100 = 1400$	$70 \times 100 = 7000$
$28 \times 100 = 2800$	$84 \times 100 = 8400$
$42 \times 100 = 4200$	$98 \times 100 = 9800$
$56 \times 100 = 5600$	

- 3) The missing side is 11m.
 $46 - 12 - 12 = 22$
 $22 \div 2 = 11$
 $11m = 1100cm$