

Multiply decimals by integers

1 What calculations are shown by the place value counters?

a)

1	1	1	1
1	1	1	1

0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1

× = × =

b)

1	1	1	1	1	1	1
1	1	1	1	1	1	1

× =

0.1	0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1	0.1	0.1

× =

c)

1	1	1	1	1
1	1	1	1	1
1	1	1	1	1

0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.1

× = × =

What do you notice?



2 Use the place value charts to help you work out the multiplications.

a)

Ones			Tenths	
1	1	1	0.1	0.1
1	1	1	0.1	0.1
1	1	1	0.1	0.1

		3	·	2	
	×			3	
			·		

b)

Ones				Tenths			
1	1	1	1	0.1	0.1	0.1	0.1
				0.1	0.1		
1	1	1	1	0.1	0.1	0.1	0.1
				0.1	0.1		

		4	·	6		
	×			2		
			·			

3 Work out the multiplications. Draw your answers.

a) $12.2 \times 3 =$

Tens	Ones	Tenths

b) $2.01 \times 4 =$

Tens	Ones	Tenths





- 4 Nijah has worked out 3.72×3

			3	·	7	2
		×				3
			1	1	·	1
			1	2		6

Work out the multiplications.

a)

		4	·	8	6
		×			4

b)

			2	·	0	9
		×				6

- 5 Work out the multiplications.

a) $5.2 \times 4 =$

d) $= 2.34 \times 3$

b) $14.3 \times 3 =$

e) $11.505 \times 4 =$

c) $6 \times 9.1 =$

f) $9.602 \times 6 =$



- 6 0.25 kg of flour is needed to make one cake.
How much flour is needed to make four cakes?

- 7 Work out the multiplications.

a) $7.2 \times 2 =$

b) $= 3.45 \times 3$

$7.2 \times 4 =$

$= 34.5 \times 3$

$7.2 \times 8 =$

$= 345 \times 3$

- 8 Amir is solving 3.4×4



To solve this, I did 34×4 , which was 136
Then I multiplied my answer by 10 to get an answer of 1,360

Do you agree with Amir? _____

Explain why.

- 9 Use the digits 1, 2, 3 and 4 once each to create a calculation.

1	2	3	4
<input type="text"/>	·	<input type="text"/>	<input type="text"/>
<input type="text"/>	×	<input type="text"/>	<input type="text"/>

How many different products can you make?

