Multiply decimals by integers

1 Use place value counters to solve the calculations.

a) 3.2 × 3

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

b) 4.6 × 2

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

2 Solve the multiplication. Draw your answer on a place value chart.

12.2 × 3

3 Nijah uses long multiplication to solve 3.72 × 3

		3	7	2	
	×			3	
		0	0	6	
		2	1	0	
		9	0	0	
	1	1	1	6	

Use long multiplication to work out the calculations.

a)

		4	8	6	
	×			4	

b)

		2	0	9	
	×			6	

4 Work out the multiplications.

a) 5.2 × 4

b) 14.3 × 3

c) 6 × 9.1

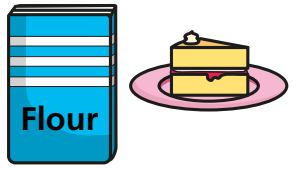
d) 2.34 × 3

e) 11.505 × 4

f) 9.602 × 6

5 0.25 kg of flour is needed to make one cake.

How much flour is needed to make four cakes?



6 Work out the multiplications.

a) 7.2 × 2

7.2 × 4

14.4 × 4

7.2 × 8

b) 3.45 × 3

34.5 × 3

345 × 3

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Use long multiplication to work out the calculations.

a)

		4	·	8	6
	×				4

b)

		2	·	0	9
	×				6

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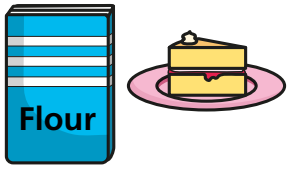

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345 × 3

7 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.

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

1	2	3	4				
					·		×

a) How many different products can you make?

b) What is the greatest possible product?

c) What is the smallest possible product?

d) What is the product closest to 12?

Compare answers with a partner.

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