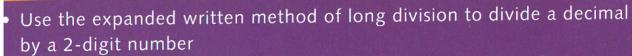
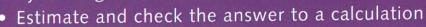
nit 8, Week 2, Lesson 2

pividing decimals using the expanded written nethod of long division







Find the missing numbers.

a
$$5.6 \times 1 = 560$$
b $3.32 \times 1 = 332$
c $8.7 \times 1 = 87$

d $4.9 \times 1 = 49$
e $6.78 \times 1 = 678$
f $0.47 \times 1 = 47$

g $56.2 \times 1 = 562$
h $0.39 \times 1 = 39$
i $7.59 \times 100 = 10$

j $\times 100 = 345$
k $0.03 \times 100 = 10$
l $\times 10 = 21$

c
$$8.7 \times 2 = 8$$

d
$$4.9 \times 2 = 49$$

c
$$8.7 \times 2 = 87$$

f $0.47 \times 2 = 47$

$$g 56.2 \times 10^{-2} = 562$$

h
$$0.39 \times / = 3$$

i
$$7.59 \times 100 =$$

$$j = 4 \times 100 = 345$$

$$1 \times 10 = 2^{\circ}$$

$$\mathbf{m} \ 0.19 \times \mathbf{0} = 19$$

$$n \sim \times 100 = 46$$

1 For each division calculation write your estimate, then use the expanded written method to work out the answer. Choose your method from the examples given.

Example

58.32 → 18			
58·32 ÷ 18 is equivalent to 5832 ÷ 18 ÷ 100			
3 2 4		3 · 2 4	
18 5 8 3 2		18 5 8 · 3 2	
- 5 4 0 0	(300×18)	-54.00 (300 × 18)
4 3 2		4 · 3 2	
- 360	(20×18)	$ 3 \cdot 6 \cdot 0 $ (20 × 18)	
7 2	swer to 2 decimal ris	0 · 7 2	
- 72	(4×18)	$- 0 \cdot 7 \cdot 2 (4 \times 18)$	
0		0.00	
$324 \div 100 = 3.24$			

a

 $25.2 \div 18$

 $93.6 \div 13$

 $68.40 \div 15$

d 58.86 ÷ 18

g $79.42 \div 19$ $27.56 \div 13$

h $89.6 \div 35$

 $68.4 \div 19$ $15.84 \div 33$

- 2 Using each digit only once, make each of the following statements true.
 - = 1.6

= 1.7

- = 2.4

Hint Each of the 2-digit numbers is a 'teen' number.

- 1 Find the answer to each of these problems.
 - a 14 friends go to a cafe to celebrate a birthday. The bill comes to a total of £93.52. They share the cost equally between them. How much do they each pay?
 - c Miriam buys 15 m of fabric costing £26.50 per metre and 23 m of another fabric costing £16.25 per metre. Both fabrics are on sale at a 15% discount. How much does she pay in total?
- **b** Jasper practises after school for the long jump competition. Each time he practises he jumps 15 times. In one afternoon he jumps a total distance of 78.75 m. What is the average length of each of his jumps?
- d Marek buys 31 cupcakes to share with his friends. His bill is £74.40 and then he gets 10% off. How much does each cupcake cost him?
- 2 Write three different situations when you would divide numbers including decimals.

