AC
EA
AA
AM
AP

Decimal fractions

Place Value Practice with hundredths

We are learning to use tenths and hundredths

Example: Fill in your worksheet as shown

Example: 5345.63

1000	100	10	1	$\frac{1}{10}$	$\frac{1}{100}$
5	3	4	5	6	3

Expanded number: 5000 +300 + 40 + 1 + $\frac{6}{10}$ +$\frac{3}{100}$

Exercise 1

What to do

1) Fill in your work sheet
2) Then write the number in expanded form

1)	134.52	(2)	8.75	(3)	12.15
4)	418.91	(5)	23.83	(6)	21.61
7)	0.56	(8)	0.03	(9)	3.09
10)	215.25	(11)	17	(12)	8675
13)	1569	(14)	1045.08	(15)	380.14
16)	99.4	(17)	0.05	(18)	0.31
19)	4104.38	(20)	800.52		

Exercise 2

What to do:

Write the expanded numbers as a decimal fraction

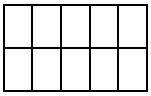
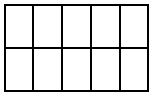
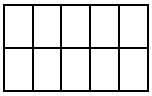
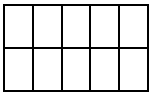
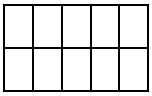
Question	1000	100	10	1	$\frac{1}{10}$	$\frac{1}{100}$
1	6	3		2	1	4
2			8	9		
3		2	3	4	6	
4	3	4		8		6
5					8	
6		5	7	4		8

Question	1000	100	10	1	$\frac{1}{10}$	$\frac{1}{100}$
7		6		7	7	
8	3		7	9		4
9		8	2	4	6	
10	4	3		1		2
11	9				8	
12	7	2		5		8

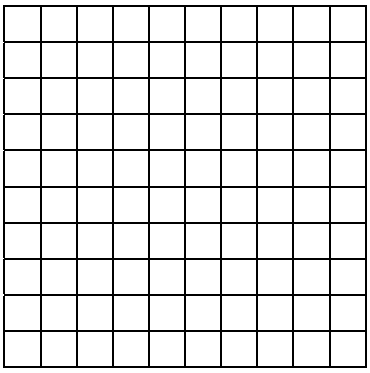
Exercise 3

On the diagram provided colour in the decimal fraction

1) 0.7 2) 0.2 3) 0.4 4) 0.15 5) 0.95

1)  2)  3)  4)  5) 

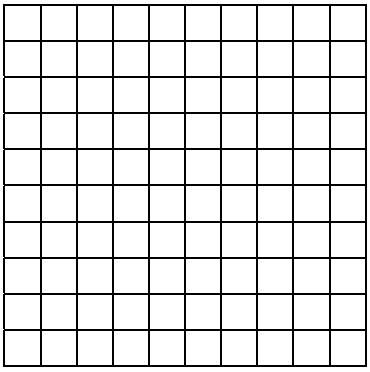
On the diagram provided colour in the decimal fraction



6) a) 0.64 in red and 0.23 in blue

b) Now write as a **fraction** the total area shaded.
Where possible simplify the fraction

c) Now write the area not shaded as a **decimal fraction.**



7) a) 0.38 in red and 0.49 in blue

b) Now write as a **fraction** the total area shaded.
Where possible simplify the fraction

c) Now write the area not shaded as a **decimal fraction.**

Exercise 4

Write each of the following as a mixed number and a decimal

Example $\frac{113}{100} = 1\frac{13}{100} = 1.13$

1) $\frac{24}{100}$ (2) $\frac{15}{100}$ (3) $\frac{14}{100}$

4) $\frac{36}{100}$ (5) $\frac{70}{100}$ (6) $\frac{38}{100}$

7) $\frac{140}{100}$ (8) $\frac{101}{100}$ (9) $\frac{34}{100}$

10) $\frac{148}{100}$

Exercise 5

Underline the hundreds in each question

1)	86,243.1	(2)	2,726.73	(3)	90,000
4)	1,234.6	(5)	1,167.9	(6)	2,450.012
7)	45,659.345	(8)	12,345.8	(9)	456.67
10)	9,012.89	(11)	5,578.897	(12)	58,921.21

Exercise 6

Put a circle around the digit in the hundredths place

1)	24.741	(2)	1.8932	(3)	78.04
4)	567.15	(5)	4536.407		

Exercise 7

Add one hundredth ($\frac{1}{100}$) to each of these numbers

1)	0.7	(2)	0.38	(3)	12.09
4)	24.45	(5)	12.64	(6)	168.42
7)	2 145.2	(8)	10	(9)	23.99
10)	8 847	(11)	974 211	(12)	644.09

13)	0.77	(14)	329.89	(15)	2 327.82
16)	1 000.09	(17)	60 000.5	(18)	45.89

Exercise 8

Take one hundreth ($\frac{1}{100}$) from each of these numbers

1)	39.68	(2)	32.14	(3)	123.71
4)	0.82	(5)	45.74	(6)	56.10
7)	286.01	(8)	39.5	(9)	8.20
10)	478.300	(11)	100.00	(12)	10.01

Exercise 9

1)	445.19 + .01	(2)	698.34 + .01	(3)	999.99 + .01
4)	329.20 + .01	(5)	4249.54 + .01	(6)	204.04 + .01
7)	3000.99 + .01	(8)	49.09 + .01	(9)	5015.34 + .01

Exercise 10

1)	321.73 - 0.01	(2)	90.76 - 0.01	(3)	603.49 - 0.01
4)	819.02 - 0.01	(5)	3001.04 - 0.01	(6)	6004.71 – 0.01
7)	30.00 - 0.01	(8)	6.55 - 0.01	(9)	20.01 - 0.01
10)	1 - 0.01	(11)	0.58 - 0.01	(12)	88.27 - 0.01
13)	436.12 - 0.01	(14)	0.07 - 0.03	(15)	7890 .21 - 0.01

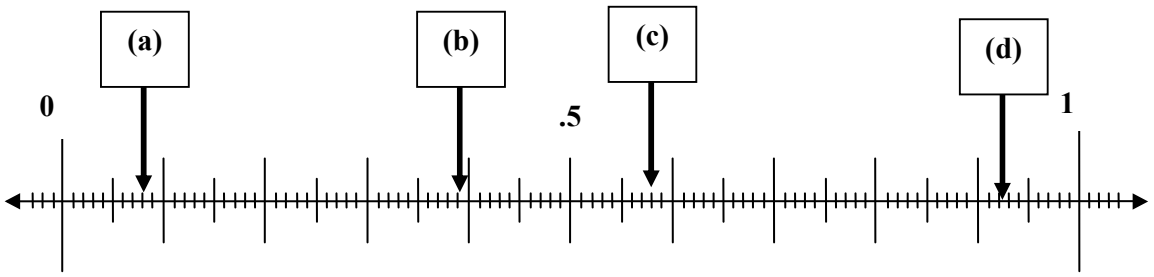
Exercise 11

1) What digit is in the tens place? 395.98
2) What digit is in the tenths place? 1125.683
3) What digit is in the hundredths place? 345.891
4) What digit is in the hundreds place? 2349.782
5) Write a 3 digit number with 6 in the hundredths place?
6) Write a 4 digit number with 6 in the hundreds place?
7) Write a 2 digit number with 5 in the hundredths place

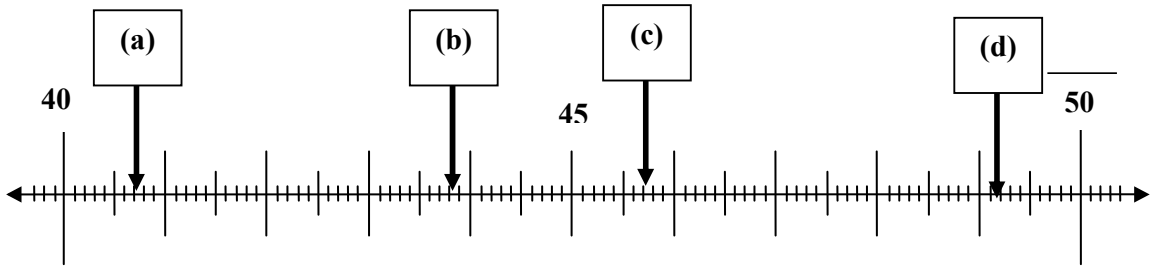
Exercise 12

On each of the number lines below, the 4 arrows are pointing to different numbers. Write down what numbers they are.

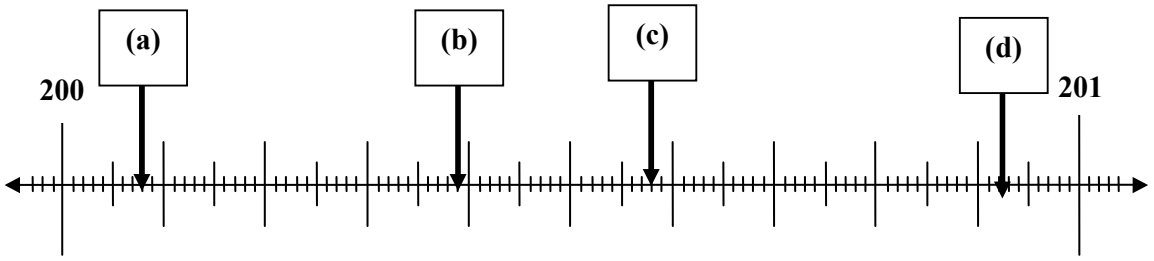
1)



2)



3)



Exercise 13

Write as a decimal fraction (if possible simplify)

1) 6 lots of $\frac{2}{100}$ (2) 4 lots of $\frac{1}{100}$ (3) 2 lots of $\frac{2}{100}$

4) 5 lots of $\frac{15}{100}$ (5) 6 lots of $\frac{12}{100}$ (6) 4 lots of $\frac{120}{100}$

7) In your maths book, write six problems of your own like those above. Work out the answers for them then swap books with another member of your group. While you check that their problems are correct, they will check the ones you have written.

8) Write and answer 3 more problems but this time use a multiplication sign in the problem

9) Write one word problem about multiplying hundredths. Hand this in to your teacher for marking

Exercise 14

Write as a decimal fraction (if possible simplify)

1)	0.03×4	(2)	0.02×2	(3)	0.01×5
4)	1.03×3	(5)	2.01×2	(6)	1.03×3
7)	12.02×3	(8)	11×0.05	(9)	0.06×5
10)	0.07×9	(11)	0.05×8	(12)	0.04×16
13)	12×0.04	(14)	7×0.08	(15)	20×0.03

Exercise one worksheet

Question	1000	100	10	1	$\frac{1}{10}$	$\frac{1}{100}$	Expanded number
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
15							
16							
17							
18							
19							
20							

Place Value Practice (Hundredths)
Answers

Exercise 1

Question	1000	100	10	1	$\frac{1}{10}$	$\frac{1}{100}$	Expanded number
1		1	3	4	5	2	$100 + 30 + 4 + \frac{5}{10} + \frac{2}{100}$
2				8	7	5	$8 + \frac{7}{10} + \frac{5}{100}$
3			1	2	1	5	$10 + 2 + \frac{1}{10} + \frac{5}{100}$
4		4	1	8	9	1	$400 + 10 + 8 + \frac{9}{10} + \frac{1}{100}$
5			2	3	8	3	$20 + 3 + \frac{8}{10} + \frac{3}{100}$
6			2	1	6	1	$20 + 1 + \frac{6}{10} + \frac{1}{100}$
7					5	6	$\frac{5}{10} + \frac{6}{100}$
8						3	$\frac{3}{100}$
9				3		9	$\frac{9}{100}$
10		2	1	5	2	5	$200 + 10 + 5 + \frac{2}{10} + \frac{5}{100}$
11			1	7			17
12	8	6	7	5			8000 + 600 + 70+5
13	1	5	6	9			1000 + 500 + 60 + 9
15	1	0	4	5		8	1000 + 40 + 5
16			9	9	4		$90 + 9 + \frac{4}{10}$
17						5	$\frac{5}{100}$
18					3	1	$\frac{3}{10} + \frac{1}{100}$
19	4	1	0	4	3	8	$4000 + 100 + 4 + \frac{3}{10} + \frac{8}{100}$
20		8			5	2	$800 + \frac{5}{10} + \frac{2}{100}$

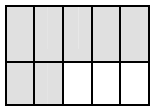
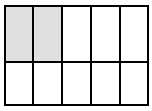
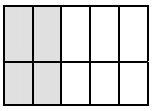
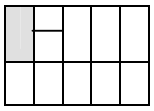
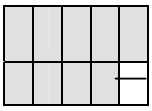
Exercise 2

1)	6301.14	(2) 89	(3) 234.6	(4) 3401.06
5)	0.8	(6) 571.08	(7) 607.7	(8) 3079.04
9)	824.6	(10) 4301.02	(11) 9000.8	(12) 7205.08

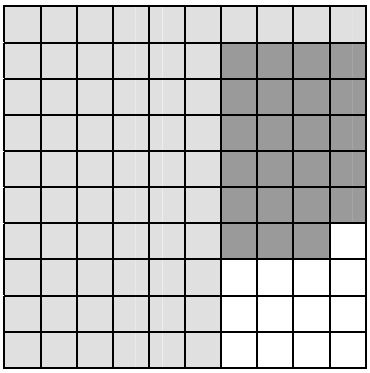
Exercise 3

On the diagram provided colour in the decimal fraction

1) 0.7 2) 0.2 3) 0.4 4) 0.15 5) 0.95

1)  2)  3)  4)  5) 

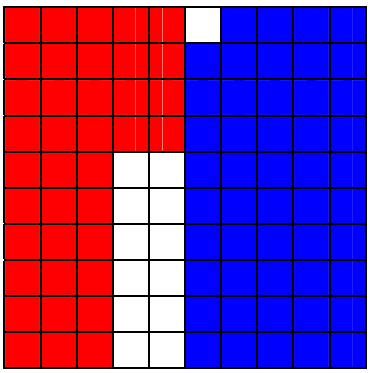
On the diagram provided colour in the decimal fraction



8) a) 0.64 in red and 0.23 in blue

b) Now write as a **fraction** the total area shaded. Where possible simplify the fraction $\frac{87}{100}$

c) Now write the area not shaded as a **decimal fraction. 0.13**



9) a) 0.38 in red and 0.49 in blue

b) Now write as a **fraction** the total area shaded. Where possible simplify the fraction $\frac{87}{100}$

c) Now write the area not shaded as a **decimal fraction. 0.13**

Exercise 4

1) $\frac{24}{100} = 0.24$ (2) $\frac{15}{100} = 0.15$ (3) $\frac{14}{100} = 0.14$

4) $\frac{36}{100} = 0.36$ (5) $\frac{70}{100} = 0.7$ (6) $\frac{38}{100} = 0.38$

7) $\frac{140}{100} = 1.40$ (8) $\frac{101}{100} = 1.01$ (9) $\frac{34}{100} = 0.34$

10) $\frac{148}{100} = 1.48$

Exercise 5

Underline the hundreds in each question

1) 86,243.1 (2) 2,726.73 (3) 90,000

4) 1,234.6 (5) 1,167.9 (6) 2,450.012

7) 45,659.345 (8) 12,345.8 (9) 456.67

10) 9,012.89 (11) 5,578.897 (12) 58,921.21

Exercise 6

Put a circle around the digit in the hundredths place. Actually they are underlined here

1) 24.741 (2) 1.8932 (3) 78.04

4) 567.15 (5) 4536. 407

Exercise 7

Add one hundredth ($\frac{1}{100}$) to each of these numbers

1) 0.71 (2) 0.39 (3) 12.1
4) 24.46 (5) 12.65 (6) 168.43
7) 2145.21 (8) 10.01 (9) 24
10) 8847.01 (11) 9742 11.01 (12) 644.1
13) 0.78 (14) 329.90 (15) 2327.83
16) 1000.1 (17) 60000.51 (18) 45.90

Exercise 8

Take one hundredth ($\frac{1}{100}$) from each of these numbers

1) 39.67 (2) 32.13 (3) 123.70
4) 0.81 (5) 45.73 (6) 56.09
7) 286. (8) 39.4 (9) 8.19
10) 478.29 (11) 99.99 (12) 10.0

Exercise 9

1)	445.2	(2)	698.35	(3)	10000
4)	329.21	(5)	4249.55	(6)	204.05
7)	3001	(8)	49.1	(9)	5015.35

Exercise 10

1)	321.72	(2)	90.75	(3)	603 .48
4)	819.01	(5)	3001.03	(6)	6004.7
7)	29.99	(8)	6.54	(9)	20
10)	0.99	(11)	0.57	(12)	88.26
13)	436.11	(14)	0.04	(15)	7890.2

Exercise 11

1) .9
2) 6
3) 9
4) 3
5) Any 3 digit number with 6 in the hundredths place?
6) Any 4 digit number with 6 in the hundreds place?
7) Any 2 digit number with 5 in the hundredths place

Exercise 12

1)	a)	0.08	(b)	0.39	(c)	0.58	(d)	0.92
2)	a)	40.08	(b)	43.9	(c)	45.8	d)	49.2
3)	a)	200.08	(b)	200.39	(c)	200.58	(d)	200.92

Exercise 13

1) $\frac{12}{100}$ (2) $\frac{4}{100}$ (3) $\frac{4}{100}$

4) $\frac{75}{100}$ (5) $\frac{72}{100}$ (6) $\frac{480}{100} = 4\frac{8}{10} = 4\frac{4}{5}$

Exercise 14

1)	0.12	(2)	0.04	(3)	0.05
4)	3.09	(5)	4.02	(6)	3.09
7)	36.06	(8)	5.65	(9)	0.3
10)	0.63	(11)	0.4	(12)	0.64
13)	0.48	(14)	0.56	(15)	0.6