1 **a)** Draw counters to show 8 on the place value chart.

Ones	Tenths	Hundredths
OOOOOOOO		

b) Complete the division.

$8 \div 100 =$ **0.08**

c) Draw counters to show your answer on the place value chart.

Ones	Tenths	Hundredths
		OOOOOOOO

What do you notice?

2 **a)** Draw counters to show 80 on the place value chart.

Tens	Ones	Tenths	Hundredths
OOOOOOO O			

b) Complete the division.

$80 \div 100 =$ **0.8**

c) Draw counters to show your answer on the place value chart.

Tens	Ones	Tenths	Hundredths
		OOOOOO OO	

What do you notice?

3 Complete the sentence.

To divide by 100 you move the counters **2** places to

the **right**

4 Complete the calculations.

a) $3 \div 100 =$ **0.03**

d) **0.6** $= 60 \div 100$

b) $90 \div 100 =$ **0.9**

e) **50** $\div 100 = 0.5$

c) **0.05** $= 5 \div 100$

f) $0.02 =$ **2** $\div 100$

5 Dora is working out $48 \div 100$ using a place value chart.

Tens	Ones	Tenths	Hundredths
●●●●	●●●● ●●●●		
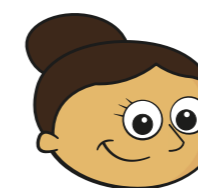
> To divide by 100 you move two places to the right, so $48 \div 100$ is 40.08

Tens	Ones	Tenths	Hundredths
●●●●			●●●● ●●●

a) Explain the mistake that Dora has made.

She hasn't moved all of the counters

b) Complete the division.

$48 \div 100 =$ **0.48**

6 This Gattegno chart shows the number 37

10	20	30	40	50	60	70	80	90
1	2	3	4	5	6	7	8	9
0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09

a) Explain how you would work out 37 ÷ 100 using this chart.

Move the counters down 2

Compare answers with a partner.

b) Use the Gattegno chart to complete the division.

92 ÷ 100 = **0.92**

c) Use the Gattegno chart to complete the division.

19 ÷ 100 = **0.19**

7 Complete the calculations.

a) 31 ÷ 100 = **0.31**   **e)** **0.29** = 29 ÷ 100

b) 60 ÷ 100 = **0.6**   **f)** **58** ÷ 100 = 0.58

c) **0.85** = 85 ÷ 100   **g)** 0.5 = **50** ÷ 100

d) 0.01 = **1** ÷ 100   **h)** 0.3 = 30 ÷ **100**

8 Complete the calculations.

a) 36 ÷ 10 = **3.6**   **b)** 91 ÷ 10 = **9.1**
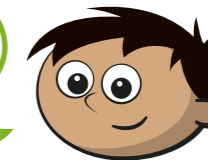
36 ÷ 100 = **0.36**   91 ÷ 100 = **0.91**

36 ÷ 10 ÷ 10 = **0.36**   91 ÷ 10 ÷ 10 = **0.91**

What do you notice?

9

> Dividing by 100 is always the same as dividing by 10 twice.
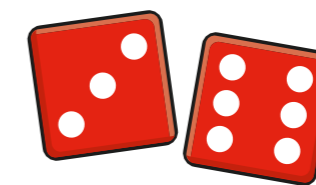
Do you agree with Amir? **Yes**

Explain your answer.

10 Roll two dice to make two 2-digit numbers.

Divide your numbers by 100. Record your answer. Roll again.

Here is an example.

36 ÷ 100 and 63 ÷ 100

▢ ÷ 100 = ▢ and ▢ ÷ 100 = ▢

▢ ÷ 100 = ▢ and ▢ ÷ 100 = ▢

What is the greatest possible answer you can get? **0.66**

What is the smallest possible answer? **0.11**

Compare answers with a partner.