Understand place value for decimals

1 Some numbers have been made on place value charts.

Complete the sentences.

a)

Ones	Tenths	Hundredths
	0.1 0.1 0.1 0.1 0.1	0.01 0.01 0.01

0.53 is equal to ☐ tenths and ☐ hundredths.

0.53 = 0.__ + 0.0__

b)

Ones	Tenths	Hundredths
1 1 1 1 1	0.1 0.1	0.01 0.01 0.01 0.01 0.01 0.01 0.01

5.27 is equal to 5 _____, 2 _____ and ☐ hundredths.

5.27 = 5 + ☐ . ☐ + ☐ . ☐ ☐

2 What number is represented on the place value chart?

Ones	Tenths	Hundredths	Thousandths
1 1	0.1 0.1 0.1		0.001 0.001 0.001 0.001

☐

3 Make these numbers on a place value chart.

| 0.7 | 0.75 | 1.75 | 1.85 | 1.853 |

4 Draw counters to represent the numbers.

Write the value of the 5 and the 2 in each number.
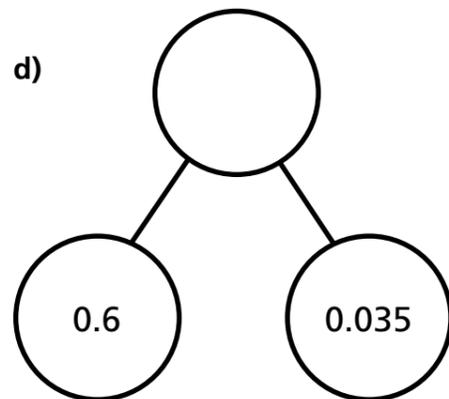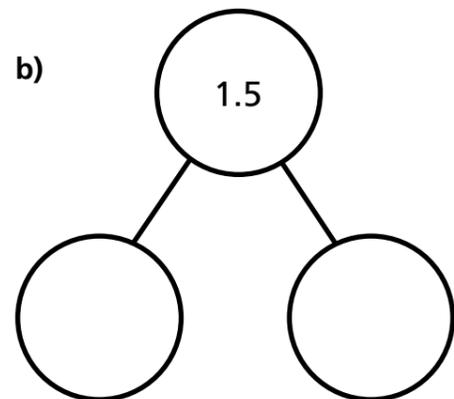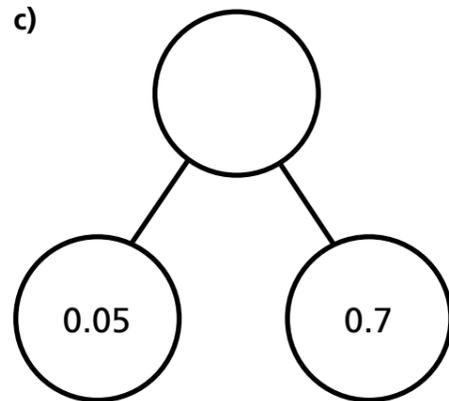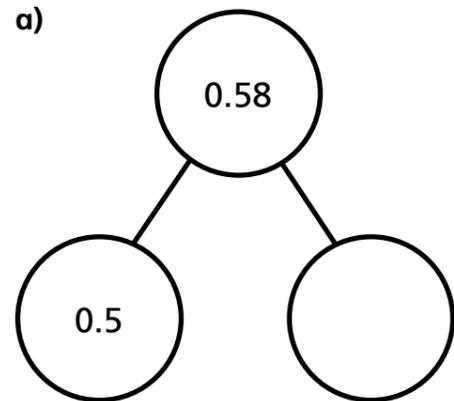
a) 0.52

Tens	Ones	Tenths	Hundredths

_____

b) 5.2

Tens	Ones	Tenths	Hundredths

_____

c) 50.02

Tens	Ones	Tenths	Hundredths

_____

5 Complete the part-whole models.

a)

0.58

0.5 ◯

c)

◯

0.05　0.7

b)

1.5

◯　◯

d)

◯

0.6　0.035

What is the value of the 5 in each number?

How does the part-whole model help?

6 Dora has made this number.

0.1　　0.01 0.01 0.01 0.01 0.01 0.01 0.01

Dora wants to make the number 2.38

Circle the counters that Dora needs to add.

1　1　　0.1　0.1　　0.01　0.01

1　1　　0.1　0.1　　0.01　0.01

7

| 5 | 0.5 | 0.05 |
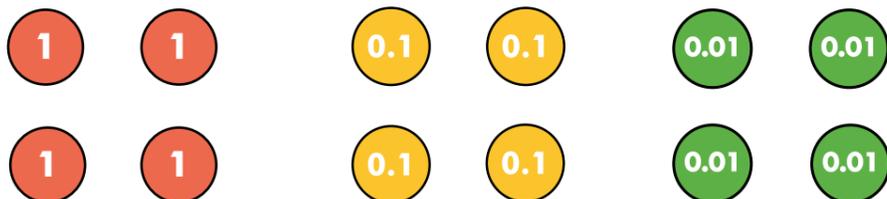
Which number is represented by the bar model?

Circle the correct answer.

55.5　　55.05　　5.55　　5.055

8 Complete the number sentences.

a) 5 tens + 3 _____ + 6 tenths + 2 _____ = __3.__2

b) ☐ hundreds + ☐ ones + ☐ _____ = 902.4

c) 7 tens + 3 ones + 9 hundredths = ☐☐.☐☐

d) 2 tenths + 8 hundredths = ☐.☐☐

9 Jack thinks 45 hundredths is the same as 0.45

Kim thinks Jack is wrong because 0.45 has only 5 hundredths.

Who is correct? _____

Give reasons for your answer.

_____

_____