

Decimal sequences

1 Esther has made a sequence with place value counters.

a) Write the numbers she has made.

Ones	Tenths
1 1 1	0.1 0.1 0.1

Ones	Tenths
1 1 1	0.1 0.1 0.1 0.1 0.1

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

1

b) She adds the same counters again.

Draw counters to show the number she has made.

Ones	Tenths

c) She adds the same counters again.

What number is shown in her chart now?

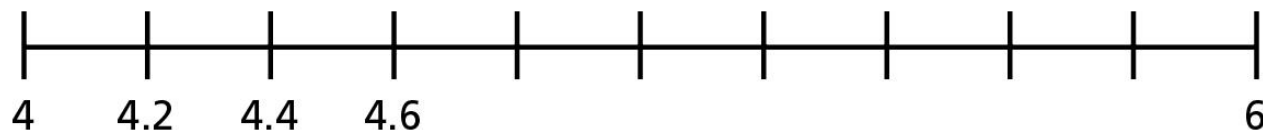
d) Explain the pattern of numbers that Esther has made.



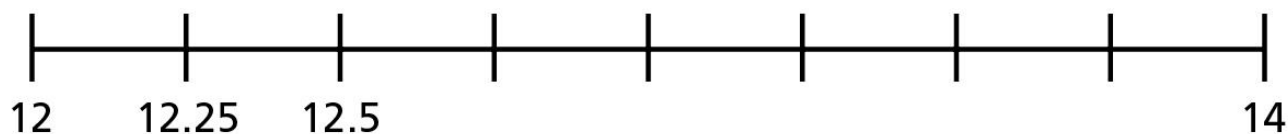
2

Complete the number lines.

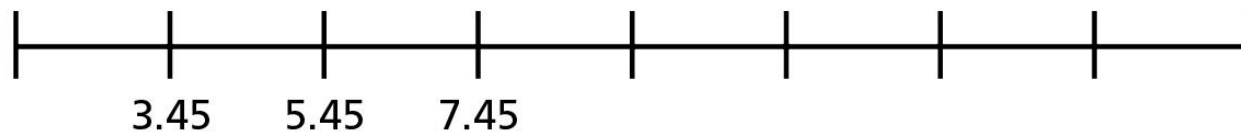
a)



b)



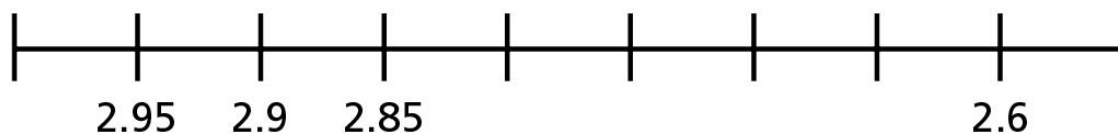
c)



Discuss with your partner how each number line increases.



3 Complete the number line.



How is this number line different from those in question 2?



4

Rosie saves money in her money box.

Each day she puts in 70 pence.



At the start of the week there is £2.80 in her money box.

a) Complete the table to show how much is in the money box at the end of each day.

Day	Mon	Tues	Wed	Thur	Fri	Sat	Sun
Money in money box							

b) Rosie wants to buy a book costing £10

For how many more days does Rosie need to save 70p?



5

Dexter has £12 on Monday morning.

Every day he spends 75p on a snack.

On what day of the week will he run out of money?

6

Write the rule and the next four terms in each sequence.

a) The rule is _____.

2.36	2.39	2.42				
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b) The rule is _____.

15.6	16.1	16.6				
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c) The rule is _____.

19	18.4	17.8				
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d) The rule is _____.

10.35	10.15	9.95				
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7

Mo and Eva are making number sequences.

a) Mo is adding 1.5 each time.

He starts with the number 3.8

What is the first number greater than 12 that he makes?

b) Will the number 15.7 be in Mo's sequence?

c) Eva's sequence decreases by 2 hundredths each time.

She picks a number to start with.

What is the difference between the 3rd and 6th number in her sequence?

