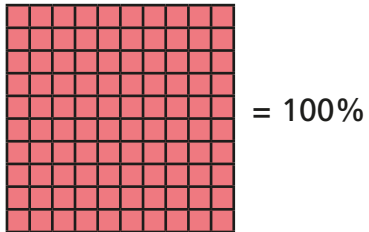


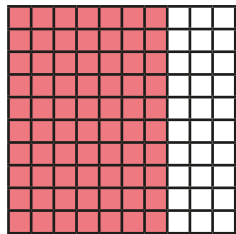
# Convert between decimals and percentages greater than 100%

1 Each hundred square represents 100%.



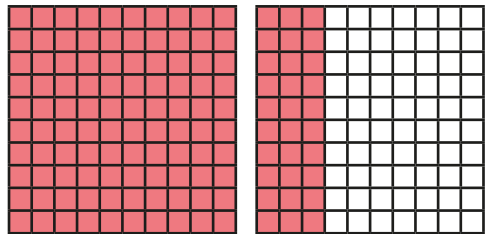
Write the percentages represented by the diagrams.

a)



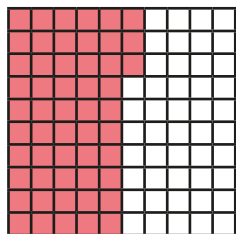
%

d)



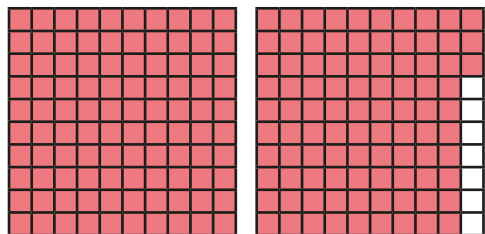
%

b)



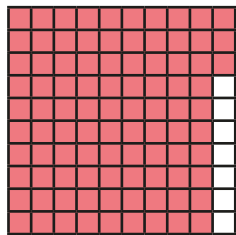
%

e)



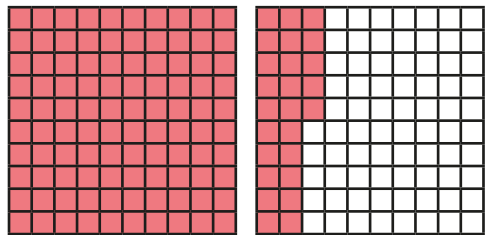
%

c)



%

f)



%

2 Complete the tables.

Percentage	Decimal	Percentage	Decimal
80%	0.8	98%	0.98
90%		99%	
100%	1	100%	1
110%		101%	1.01
120%	1.2	102%	


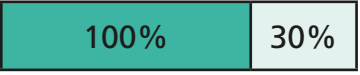
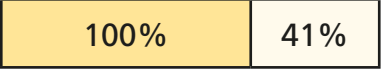

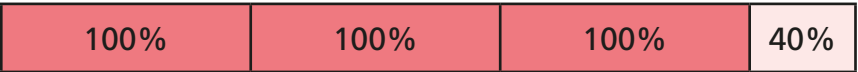
3 a) Convert the percentages to decimals.

84%	94%	104%	114%
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
126%	116%	106%	96%
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

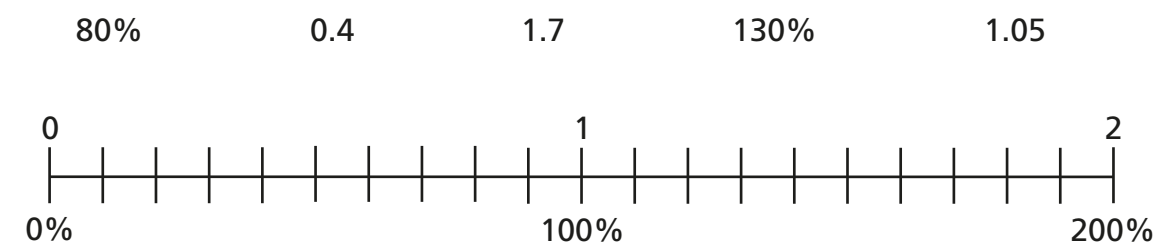
b) Convert the decimals to percentages.

0.75	0.85	0.95	1.05
<input type="text"/> %	<input type="text"/> %	<input type="text"/> %	<input type="text"/> %
0.38	1.38	2.38	0.08
<input type="text"/> %	<input type="text"/> %	<input type="text"/> %	<input type="text"/> %

4 Write the percentages represented by the bar models.

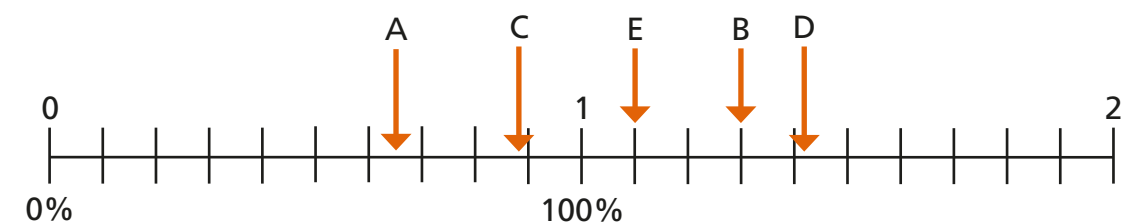
- a)  %
- b)  %
- c)  %
- d)  %
- e)  %

5 a) Label the positions of the numbers on the number line.



b) Write the numbers indicated by the arrows.

Give your answers as decimals and percentages.



- |   |         |                      |            |                        |
|---|---------|----------------------|------------|------------------------|
| A | decimal | <input type="text"/> | percentage | <input type="text"/> % |
| B | decimal | <input type="text"/> | percentage | <input type="text"/> % |
| C | decimal | <input type="text"/> | percentage | <input type="text"/> % |
| D | decimal | <input type="text"/> | percentage | <input type="text"/> % |
| E | decimal | <input type="text"/> | percentage | <input type="text"/> % |

6 Sort the cards into three groups of equivalent numbers.

103%

$\frac{13}{10}$

0.7

30% less than 1 whole

1.03

3% more than 1 whole

$\frac{130}{100}$

30% more than 1 whole

$1 - 0.3$

$\frac{103}{100}$

130%

$1 + 0.03$

70%

Group 1	Group 2	Group 3

7 Tick the statements that are possible. Explain your answers.

- a) Giving 110% effort ☐
- \_\_\_\_\_
- \_\_\_\_\_
- b) Increasing a test score by 110% ☐
- \_\_\_\_\_
- \_\_\_\_\_
- c) Decreasing a test score by 110% ☐
- \_\_\_\_\_
- \_\_\_\_\_

