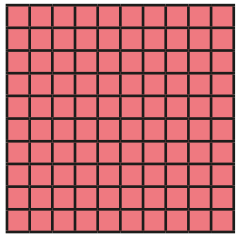


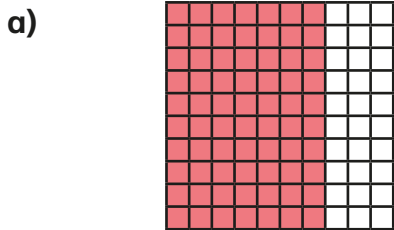
# Convert between decimals and percentages greater than 100%

1 Each hundred square represents 100%.

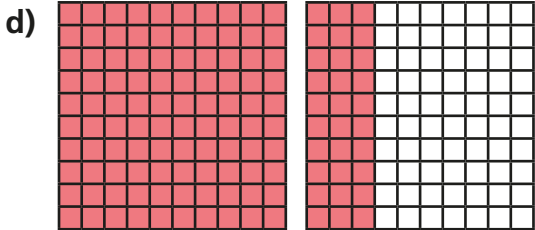


= 100%

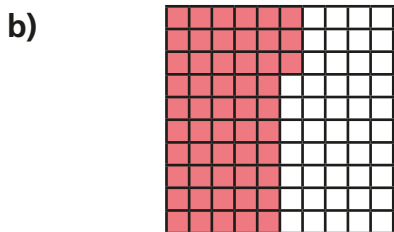
Write the percentages represented by the diagrams.



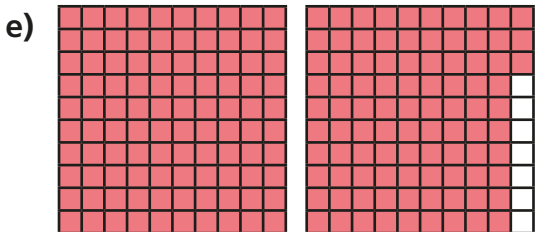
%



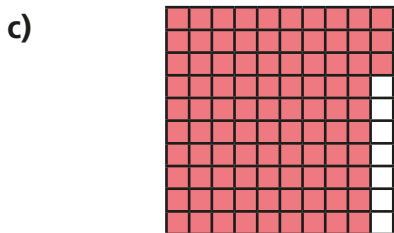
%



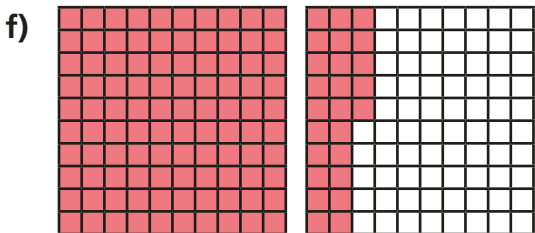
%



%



%



%

2 Complete the tables.

Percentage	Decimal
80%	0.8
90%	
100%	1
110%	
120%	1.2

Percentage	Decimal
98%	0.98
99%	
100%	1
101%	1.01
102%	

3 a) Convert the percentages to decimals.

84%

94%

104%

114%

126%

116%

106%

96%

b) Convert the decimals to percentages.

0.75

%

0.85

%

0.95

%

1.05

%

0.38

%

1.38

%



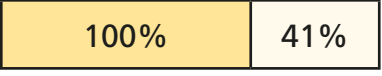

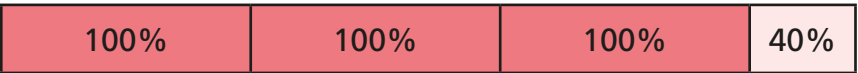
2.38

%

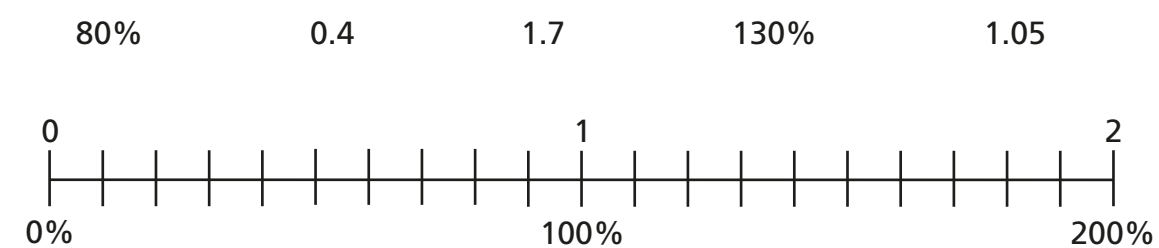
0.08

%

4 Write the percentages represented by the bar models.

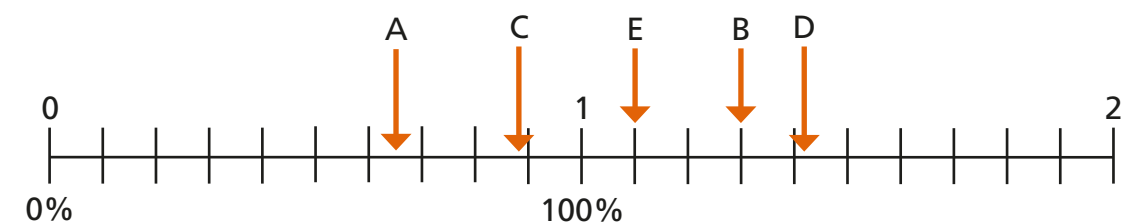
- a)  %
- b)  %
- c)  %
- d)  %
- e)  %

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% ☐
- \_\_\_\_\_
- \_\_\_\_\_

