

0	1
---	---

Table 1 describes some sets of numbers.

Table 1

A	A set of numbers that represent all possible real world quantities.
B	A set of numbers that can be written as fractions (ratios of integers).
C	A set of numbers that cannot be written as fractions (ratios of integers).

0	1	.	1
---	---	---	---

Shade in **one** lozenge to indicate which of the descriptions in **Table 1** describes the set of real numbers.

[1 mark]

A	☐
----------	-----------------------

B	☐
----------	-----------------------

C	☐
----------	-----------------------

0	1	.	2
---	---	---	---

Shade in **one** lozenge to indicate which of the descriptions in **Table 1** describes the set of irrational numbers.

[1 mark]

A	☐
----------	-----------------------

B	☐
----------	-----------------------

C	☐
----------	-----------------------

0	2
---	---

 .

1

Explain the difference between the set of natural numbers and the set of integer numbers.

[1 mark]

0	2
---	---

 .

2

Explain the difference between rational and irrational numbers.

[1 mark]

0 3 . 1 Describe the difference between natural numbers and integers.

In your answer, give **one** example of a number that is an integer but not a natural number.

[2 marks]

0 3 . 2 Describe what it means for a number to be irrational.

In your answer, give **one** example of an irrational number.

[2 marks]

03.3

Shade **one** lozenge in the **Counting** column to indicate which set of numbers is most suitable for counting and **one** lozenge in the **Measuring** column to indicate which set of numbers is most suitable for measuring real-world quantities.

[2 marks]

		Counting	Measuring
A	Integer	☐	☐
B	Natural	☐	☐
C	Rational	☐	☐
D	Real	☐	☐

0 4 . 1

Shade in **one** lozenge to indicate which of the following values is an irrational number. **[1 mark]**

A $\frac{3}{4}$ ☐

B $\sqrt{2}$ ☐

C 73 ☐

D -19 ☐

0 4 . 2

Shade in **one** lozenge to indicate which of the following values is a natural number. **[1 mark]**

A $\frac{3}{4}$ ☐

B $\sqrt{2}$ ☐

C 73 ☐

D -19 ☐

0 4 . 3

Define the set of real numbers.

[1 mark]

0 4 . 4

Shade in **one** lozenge to indicate which of the following symbols represents the set of numbers most suitable for counting the number of people in a room.

[1 mark]**A** $\mathbb{N}$ ☐**B** $\mathbb{Q}$ ☐**C** $\mathbb{R}$ ☐**D** $\mathbb{Z}$ ☐**0 4 . 5**

What is meant by the term **ordinal number**?

[1 mark]

0 5 . 1

Describe the set of real numbers.

[1 mark]

0 5 . 2

The number 5 can be written as $\frac{15}{3}$ Shade **two** lozenges to indicate which of the following statements are true.

[2 marks]

A	15 and 3 are not integers	☐
B	15 and 3 are irrational numbers	☐
C	5 is an irrational number	☐
D	5 is a natural number	☐
E	5 is a rational number	☐

0 5 . 3

Shade **one** lozenge to indicate which of the symbols below represents the set of rational numbers.

[1 mark]

A	$\mathbb{C}$	☐
B	$\mathbb{N}$	☐
C	$\mathbb{Q}$	☐
D	$\mathbb{R}$	☐
E	$\mathbb{Z}$	☐