



4.5.1 Number Systems

- 1) Tick the appropriate cells in the table below to show which set(s) of numbers contain(s) the number on the row.

The first one has been completed for you.

	Natural	Integer	Rational	Irrational	Real
$4/17$			✓		✓
π				✓	✓
117	✓	✓	✓		✓

[2 marks]

- 2) Figure 1 shows a list of seven numbers, stored in an array.

Figure 1

Index	[0]	[1]	[2]	[3]	[4]	[5]	[6]
Contents	7	21	1	76	3	8	4

Describe what an ordinal number is **and** what an ordinal number would be used for in the context of this array.

[2 marks]

- An ordinal number shows order / position / rank / place
- In an array the ordinal number would represent the position/index of the values in the array





- 3) One of the numbers listed below is a member of the set of integers, the set of rational numbers and the set of real numbers but **is not** a member of either the set of irrational numbers or the set of natural numbers.

- A. -23
- B. $\frac{4}{15}$
- C. 54
- D. 42.123

State the letter (A-D) that indicates which number this is.

[1 mark]

- A
-

- 4) State the letter (A-E) that indicates which set of numbers would be most appropriate to use to measure the length of an item, such as a piece of string.

- A. Rational
- B. Irrational
- C. Natural
- D. Integer
- E. Real

[1 mark]

- E
-





5) Table 1 shows four values.

Table 1

A	$\sqrt{6}$
B	$(-16)^2$
C	-5
D	0.5

a) Which of the values is a natural number?

[1 mark]

- B

b) Which of the values is an irrational number?

[1 mark]

- A

c) Which of the values is an integer but **not** a natural number?

[1 mark]

- C

