

place value puzzles

In each puzzle, work out which number from the grid is being described.

Puzzle 1

My number is not an integer.

My number has a 1 in the units column

My number is greater than thirty

My number is \neq 31.3

My number has 1 in the hundredths column

| | | |
|------|-------|------|
| 1.01 | 301 | 31.1 |
| 3.1 | 3.101 | 31.3 |
| 30.1 | 31.01 | 1.03 |

Puzzle 2

My number is less than eighteen thousand

My number is \neq 180

My number is $>$ 18

My number has 8 in both the tens and tenths columns

| | | |
|-------|-------|------|
| 180 | 18.01 | 1.81 |
| 0.18 | 1800 | 188 |
| 180.8 | 18180 | 18.8 |

Puzzle 3

My number is \leq 0.2

My number is \neq 0.15

My number is greater than one tenth

My number has no hundredths

| | | |
|------|------|------|
| 0.24 | 0.2 | 0.12 |
| 0.02 | 0.01 | 0.5 |
| 0.15 | 2.02 | 0.1 |

Puzzle 4

My number is $<$ 44,000

My number is more than five thousand four hundred and fifty

My number is \neq 5454

My number has 5 hundreds

My number is greater than fifteen thousand

| | | |
|--------|--------|--------|
| 14,500 | 15,501 | 45000 |
| 5401 | 5444 | 5454 |
| 14,534 | 4544 | 10,500 |

Puzzle 5

What is the largest number that can be made by rearranging these cards?

| | | | | |
|---|---|---|---|---|
| 1 | 2 | 4 | . | 8 |
|---|---|---|---|---|

Puzzle 6

What is the **smallest** number that can be made by rearranging these cards?

| | | | | |
|---|---|---|---|---|
| 5 | 3 | 2 | . | 6 |
|---|---|---|---|---|

Puzzle 7

What is three thousand four hundred and six in figures?

Puzzle 8

Write 1 million and eighty three in figures.

Puzzle 9

Complete these statements using the symbols

$=$, $>$, $<$

| | | |
|------|--|-------|
| 0.40 | | 0.400 |
| 0.35 | | 0.300 |
| 0.2 | | 0.25 |
| 1.5 | | 1.05 |
| 1.8 | | 1.80 |
| 0.01 | | 0.1 |
| 0.99 | | 0.999 |

Puzzle 11

Put these numbers in order of size,
from smallest to largest

0.04, 0.4, 4.4, 1.4, 0.104

Puzzle 12

Write down the value of the figure 7
in the number 5768

0.2

0.24

0.28

Puzzle 14

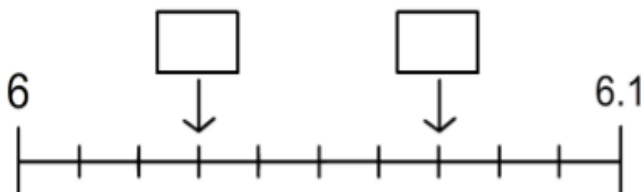
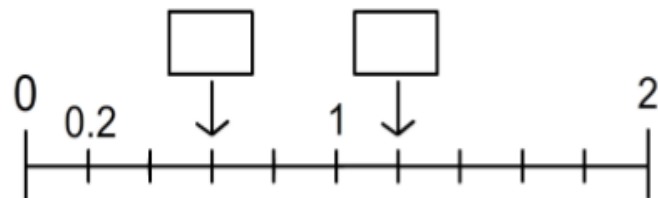
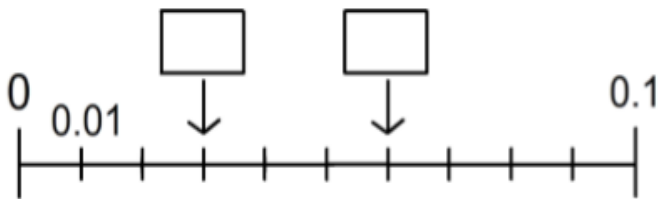
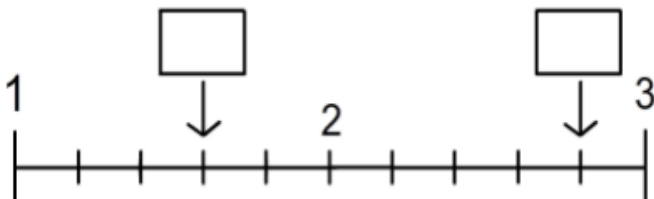
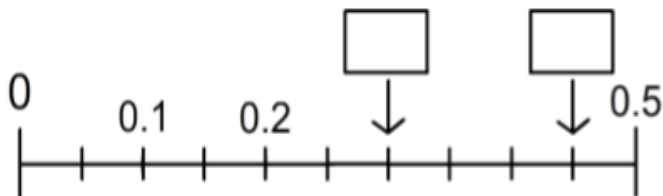
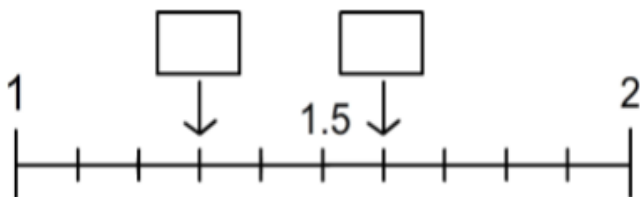
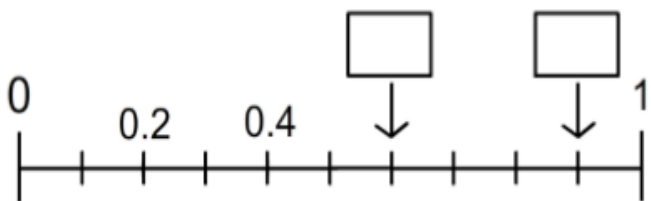
What is the next number in this sequence?

0.16

0.13

0.1

Complete the missing numbers on these number lines:



answers

In each puzzle, work out which number from the grid is being described.

Puzzle 1 (31.01)

My number is not an integer.

My number has a 1 in the units column

My number is greater than thirty

My number is \neq 31.3

My number has 1 in the hundredths column

| | | |
|------|--------------|------|
| 1.01 | 301 | 31.1 |
| 3.1 | 3.101 | 31.3 |
| 30.1 | 31.01 | 1.03 |

Puzzle 2 (180.8)

My number is less than eighteen thousand

My number is \neq 180

My number is $>$ 18

My number has 8 in both the tens and tenths columns

| | | |
|--------------|-------|------|
| 180 | 18.01 | 1.81 |
| 0.18 | 1800 | 188 |
| 180.8 | 18180 | 18.8 |

Puzzle 3 (0.2)

My number is \leq 0.2

My number is \neq 0.15

My number is greater than one tenth

My number has no hundredths

| | | |
|------|------------|------|
| 0.24 | 0.2 | 0.12 |
| 0.02 | 0.01 | 0.5 |
| 0.15 | 2.02 | 0.1 |

Puzzle 4 (15,501)

My number is $<$ 44,000

My number is more than five thousand four hundred and fifty

My number is \neq 5454

My number has 5 hundreds

My number is greater than fifteen thousand

| | | |
|--------|---------------|--------|
| 14,500 | 15,501 | 45000 |
| 5401 | 5444 | 5454 |
| 14,534 | 4544 | 10,500 |

Puzzle 5

What is the largest number that can be made by rearranging these cards?



Puzzle 6

What is the **smallest** number that can be made by rearranging these cards?



Puzzle 7

What is three thousand four hundred and six in figures? **3406**

Puzzle 8

Write 1 million and eighty three in figures.

1,000,083

Puzzle 9

Complete these statements using the symbols =, >, <

=, >, <

| | | |
|------|---|-------|
| 0.40 | = | 0.400 |
| 0.35 | > | 0.300 |
| 0.2 | < | 0.25 |
| 1.5 | > | 1.05 |
| 1.8 | = | 1.80 |
| 0.01 | < | 0.1 |
| 0.99 | < | 0.999 |

answers 2

Puzzle 10

Write down a number between 1.23 and 1.24

e.g. 1.235

Puzzle 11

Put these numbers in order of size,
from smallest to largest

0.04, 0.104, 0.4, 1.4, 4.4

Puzzle 12

Write down the value of the figure 7
in the number 5768

7 hundred

Puzzle 13

What is the next number in this sequence?

0.2

0.24

0.28

0.32

Puzzle 14

What is the next number in this sequence?

0.16

0.13

0.1

0.07

Complete the missing numbers on these number lines:

