

1 Here is a list of numbers

13 14 18 23 30 36

From the numbers in the list, write down

(i) an odd number

13 or 23

13 (1)

(1)

(ii) the multiple of 4

36 (1)

(1)

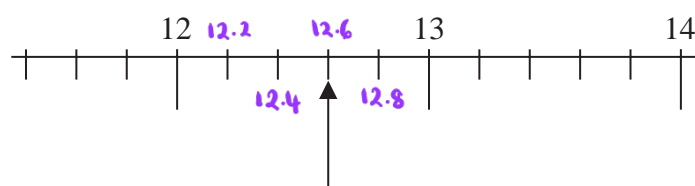
(iii) the factor of 28

14 (1)

(1)

(Total for Question 1 is 3 marks)

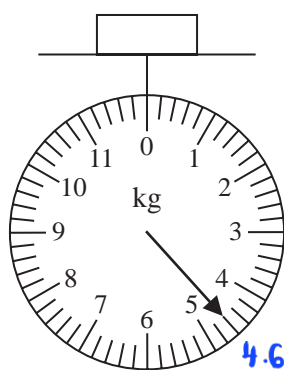
- 2 The diagram shows part of a number line.



- (a) Write down the number marked with the arrow.

12.6 (1)

The diagram shows a parcel on weighing scales.



The parcel weighs less than 6kg.

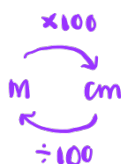
- (b) How many kilograms less?

$$6 - 4.6 = 1.4$$

1.4 (1) kilograms

- (c) Change 7.6 metres into centimetres.

$$7.6 \times 100 = 760$$



760 (1) centimetres

- (d) Change 91 600 millilitres into litres.

$$91600 \div 1000 = 91.6$$



91.6 (1) litres

Ivan goes to the gym at 7 15 pm.

- (e) Write this time using the 24-hour clock.

19 15 (1)

(Total for Question 2 is 5 marks)

- 3 The table shows the length, in kilometres, of the coastline of each of five oceans.

| Ocean | Length (kilometres) |
|----------|---------------------|
| Arctic | 45 389 |
| Atlantic | 111 866 |
| Indian | 66 526 |
| Pacific | 135 663 |
| Southern | 17 968 |

- (a) Which of these oceans has the greatest length of coastline?

Pacific ①

(1)

- (b) Write the number 17 968 in words.

Seventeen thousand nine hundred and sixty eight. ①

(1)

- (c) Write the number 66 526 correct to the nearest thousand.

→ 5 or more, we round up 6 to 7.

67 000 ①

(1)

- (d) Work out the total length of the coastlines of the Arctic Ocean and the Pacific Ocean.

$$45\,389 + 135\,663 = 181\,052$$

181 052 ①

kilometres

(1)

(Total for Question 3 is 4 marks)

- 4 The table shows the heights, in metres, of five mountains.

| Mountain | Height (metres) |
|-------------|-----------------|
| Aconcagua | 6961 |
| Makalu | 8485 |
| Kilimanjaro | 5895 |
| Mont Blanc | 4810 |
| Puncak Jaya | 4884 |

- (a) Which of these mountains has the greatest height?

Makalu (1)

(1)

- (b) Write the number 5895 in words.

Five thousand eight hundred and ninety five. (1)

(1)

- (c) Write down the value of the 8 in 4810

800 (1)

(1)

- (d) Work out the difference between the height of Aconcagua and the height of Puncak Jaya.

$$6961 - 4884$$

$$= 2077$$

2077 (1)

metres

(1)

(Total for Question 4 is 4 marks)

5 The table shows the height, in metres, of each of seven volcanoes.

| Volcano | Height (metres) |
|-----------------|-----------------|
| Acamarachi | 6046 |
| Bazman | 3490 |
| Dona Juana | 4150 |
| Kamen | 4585 |
| Mount Ararat | 5137 |
| Ojos del Salado | 6893 |
| Semeru | 3676 |

(a) Which of these volcanoes has the greatest height?

Ojos del Salado ①

(1)

(b) Write down the value of the 8 in the number 4585

tens

80 ①

(1)

(c) Write the number 6046 in words.

① six thousand and forty six

(1)

(d) Write the number 5137 correct to the nearest hundred.

3 < 5, so we round down

① 5100

(1)

(e) Work out the difference in the height of the Acamarachi volcano and the height of the Semeru volcano.

$$6046 - 3676 = 2370$$

① 2370

metres

(1)

(Total for Question 5 is 5 marks)

6 Here is a list of numbers in a box.

| | | | | | | |
|---|---|----|----|----|----|----|
| 6 | 8 | 17 | 36 | 44 | 76 | 91 |
|---|---|----|----|----|----|----|

From the numbers in the list, write down

(a) a multiple of 11

44 (1)

(1)

(b) a factor of 30

6 (1)

(1)

(c) a square number

36 (1)

(1)

(d) a prime number

17 (1)

(1)

(e) two numbers whose sum is 84

$$76 + 8 = 84$$

76

8 (1)

and

(1)

(Total for Question 6 is 5 marks)

7 The temperature in New York is -2°C

At the same time, the temperature in Rabat is 16°C higher than the temperature in New York.

(a) Work out the temperature in Rabat.

$$-2 + 16 = 14^{\circ}\text{C}$$

$$\begin{array}{r} 14 \\ \hline \end{array} \text{ } ^{\circ}\text{C}$$

(1)

Also, at the same time, the temperature in Helsinki is 17°C lower than the temperature in New York.

(b) Work out the temperature in Helsinki.

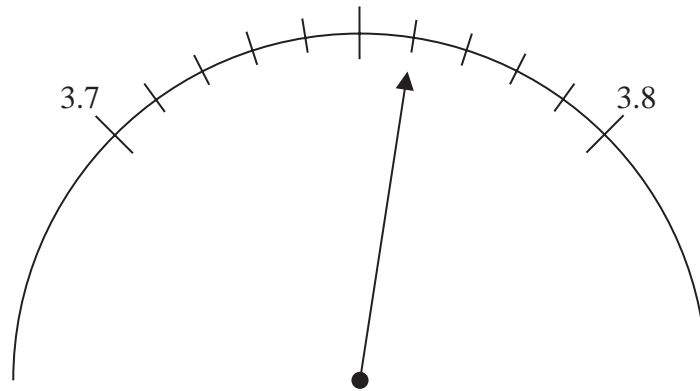
$$-2 - 17 = -19^{\circ}\text{C}$$

$$\begin{array}{r} -19 \\ \hline \end{array} \text{ } ^{\circ}\text{C}$$

(1)

(Total for Question 7 is 2 marks)

8

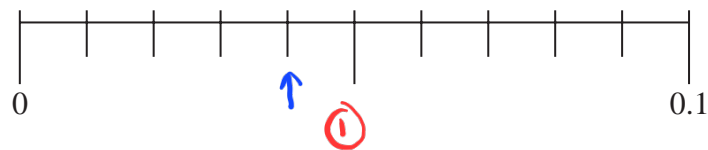


(a) Write down the number marked with the arrow on the scale above.

3.76 (1)

(1)

(b) Mark with an arrow (\uparrow) the number 0.04 on the scale below.



(1)

(c) Write the number 5.68 correct to one decimal place.

$\rightarrow 8 > 5$. round up 6 to 7.

5.7 (1)

(1)

(Total for Question 8 is 3 marks)

- 9 Nav found the following table that shows the age, in years, of each of seven cities.

| City | Age (years) |
|------------|-------------|
| Cadiz | 3124 |
| Suzhou | 2534 |
| Jenin | 4469 |
| Istanbul | 2704 |
| Nanjing | 2516 |
| Gaziantep | 5669 |
| Alexandria | 2351 |

- (a) Write down the name of the city with the greatest age.

Gaziantep (1)

- (b) Write the number 2534 in words.

Two thousand, five hundred and thirty four. (1)

- (c) Write the number 2351 correct to the nearest ten.

2350 (1)

- (d) Work out the difference between the age of Cadiz and the age of Nanjing.

608 (1) years

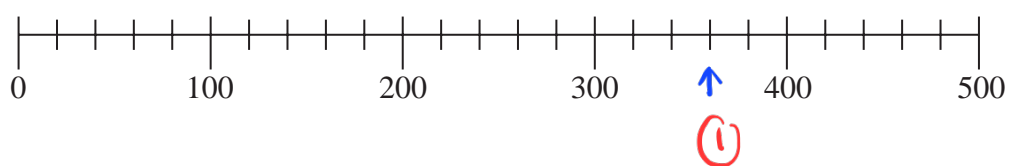
A millennium is 1000 years.

- (e) What is the age of Jenin in whole millenniums?

4 (1) millenniums

(Total for Question 9 is 5 marks)

10 Here is a scale.



(b) On the scale, mark with an arrow (\uparrow) the number 360

(1)

(Total for Question 10 is 1 marks)

11

| | | | | | | | |
|----|----|----|----|----|----|----|----|
| 10 | 15 | 23 | 25 | 27 | 28 | 33 | 35 |
|----|----|----|----|----|----|----|----|

(a) From the numbers in the box, write down

(i) an even number

10 or 28 (1)

(ii) a multiple of 9

27 (1)

(iii) a prime number

23 (1)

(3)

Here are four cards.

Each card has a number on it.

The four cards are arranged to make the number 7358

| | | | |
|---|---|---|---|
| 7 | 3 | 5 | 8 |
|---|---|---|---|

(b) (i) Show how the four cards can be arranged to make the smallest number using all four cards.

| | | | |
|---|---|---|---|
| 3 | 5 | 7 | 8 |
|---|---|---|---|

(1)

(ii) Show how the four cards can be arranged to make a correct calculation below.

$$\begin{array}{|c|} \hline 5 \\ \hline \end{array} \begin{array}{|c|} \hline 7 \\ \hline \end{array} + \begin{array}{|c|} \hline 3 \\ \hline \end{array} \begin{array}{|c|} \hline 8 \\ \hline \end{array} = 95$$

(1)

(2)

(Total for Question 11 is 5 marks)

12 The table gives the total area of forest in each of six countries.

| Country | Area of forest (km ²) |
|--------------|-----------------------------------|
| South Africa | 92 410 |
| Denmark | 5871 |
| El Salvador | 2870 |
| Bahamas | 5150 |
| Jamaica | 3371 |
| Syria | 4910 |

(a) Which of these six countries has the least total area of forest?

El Salvador (1)

(1)

(b) Write down the value of the 4 in 92410

400 (1)

(1)

Two of the six countries each have a total area of forest of 5000 km² when rounded to the nearest thousand.

(c) Write down the name of the two countries.

Bahamas and Syria (1)

(1)

(d) Write the number 3371 in words.

Three thousand, three hundred and seventy one. (1)

(1)

(Total for Question 12 is 4 marks)

- 13 The table shows the average annual rainfall, in mm, for each of five countries.

| Country | Average annual rainfall (mm) |
|----------|------------------------------|
| Colombia | 3240 |
| Jamaica | 2051 |
| Brazil | 1761 |
| Japan | 1668 |
| France | 867 |

- (a) Write the number 2051 in words.

Two thousand and fifty one (1)

(1)

- (b) Write the number 1668 correct to the nearest hundred.

1700 (1)

(1)

The average annual rainfall for Colombia is more than the average annual rainfall for Brazil.

- (c) How much more?

1479 (1)

(1)

mm

The average annual rainfall for Nigeria was 283 mm more than the average annual rainfall for France.

- (d) Work out the average annual rainfall for Nigeria.

$$867 + 283 = 1150$$

1150 (1)

(1)

mm

(Total for Question 13 is 4 marks)

14 Here is a list of numbers.

3 8 9 14 23 28 30

(a) From the numbers in the list, write down

(i) a cube number

8 ①

(1)

(ii) a factor of 70

14 ①

(1)

(iii) a multiple of 6

30 ①

(1)

(iv) a prime number.

3 or 23 ①

(1)

(Total for Question 14 is 4 marks)

15 The table below shows the maximum recorded temperature and the minimum recorded temperature on one day in each of four countries.

| Country | Maximum recorded temperature | Minimum recorded temperature |
|---------|------------------------------|------------------------------|
| Morocco | 19 °C | 11 °C |
| Qatar | 21 °C | 18 °C |
| Finland | −19 °C | −28 °C |
| Canada | 8 °C | −40 °C |

(a) Which country has the highest maximum recorded temperature?

Qatar

(1)

(b) Work out the difference between the maximum recorded temperature in Finland and the minimum recorded temperature in Finland.

9

(1)

°C

On the same day, the minimum recorded temperature in Japan is 15 °C lower than the minimum recorded temperature in Morocco.

(c) Work out the minimum recorded temperature in Japan.

11 - 15 = -4

-4

(1)

°C

(Total for Question 15 is 3 marks)

16 Here is a list of numbers.

2 8 14 15 16 18 20

From this list, write down

(a) the odd number

15 ①

(1)

(b) the multiple of 6

18 ①

(1)

(c) the square number

16 ①

(1)

(d) the prime number

2 ①

(1)

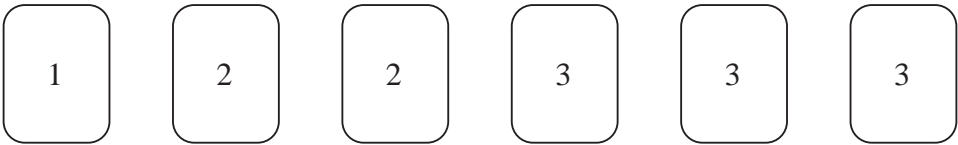
(e) two numbers with a sum of 26

8 and 18 ①

(1)

(Total for Question 16 is 5 marks)

17 Here are 6 counters.
Each counter has a number on it.



Finn takes at random one of these counters.

(i) Select with a tick (✓) the word that best describes the likelihood that Finn takes a counter with the number 2 on it.

| | | | | |
|------------|----------|-------|--------|---------|
| impossible | unlikely | evens | likely | certain |
| | ✓ ① | | | |

(ii) Select with a tick (✓) the word that best describes the likelihood that Finn takes a counter with the number 3 on it.

| | | | | |
|------------|----------|-------|--------|---------|
| impossible | unlikely | evens | likely | certain |
| | | ✓ ① | | |

(iii) Select with a tick (✓) the word that best describes the likelihood that Finn takes a counter with a number greater than 4 on it.

| | | | | |
|------------|----------|-------|--------|---------|
| impossible | unlikely | evens | likely | certain |
| ✓ ① | | | | |

(Total for Question 17 is 3 marks)

18 The table gives information about six plays written by William Shakespeare.

| Play | Number of words | Year written |
|-------------------------|-----------------|--------------|
| The Taming of the Shrew | 21 055 | 1592 |
| Henry V | 26 119 | 1599 |
| Hamlet | 30 557 | 1602 |
| Macbeth | 17 121 | 1606 |
| Julius Caesar | 19 703 | 1599 |
| King John | 20 772 | 1596 |

(a) Which of these six plays has the greatest number of words?

Hamlet (1)

(1)

Two of these six plays were written in the same year.

(b) Write down the name of each of these plays.

Henry V

and

Julius Caesar (1)

(1)

The play Othello has 9329 more words in it than the play Macbeth.

(c) Work out the number of words in the play Othello.

$$17121 + 9329 = 26450$$

26450

(1)

(1)

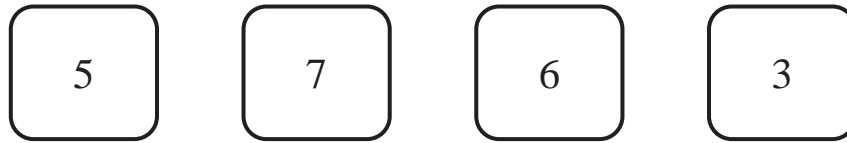
(d) Write the number 21 055 in words.

Twenty one thousand and fifty five (1)

(1)

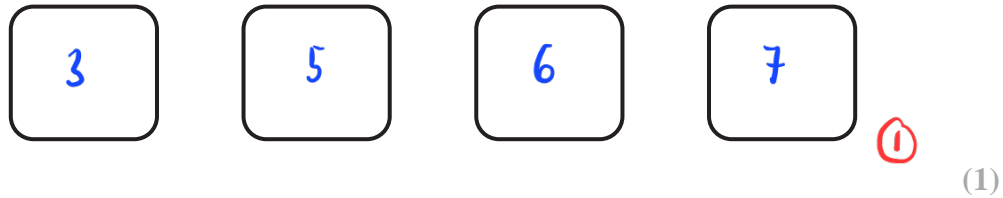
(Total for Question 18 is 4 marks)

- 19 Here are four cards.
Each card has a number on it.

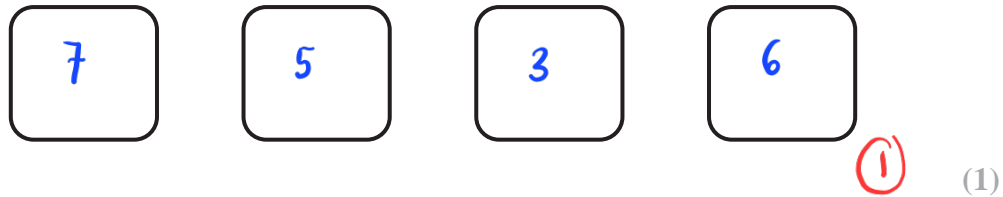


These four cards are arranged to make the number 5763

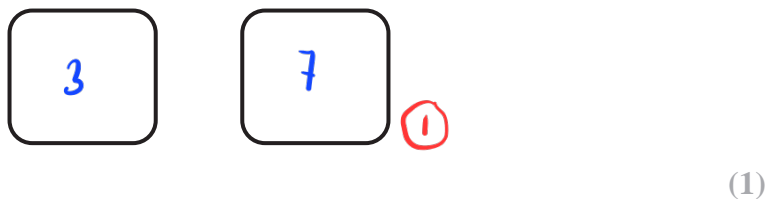
- (a) Arrange the four cards to make the smallest possible number.



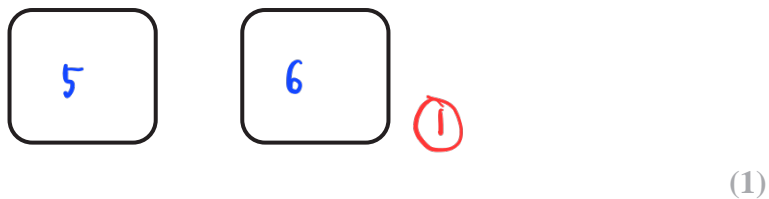
- (b) Arrange the four cards to make the largest possible **even** number.



- (c) Arrange two of the cards to make a prime number.

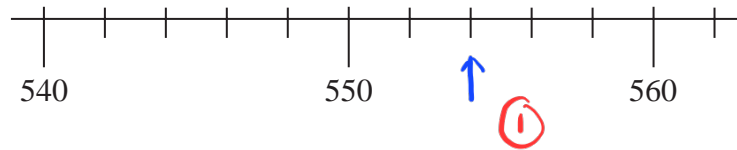


- (d) Arrange two of the cards to make a multiple of 8



(Total for Question 19 is 4 marks)

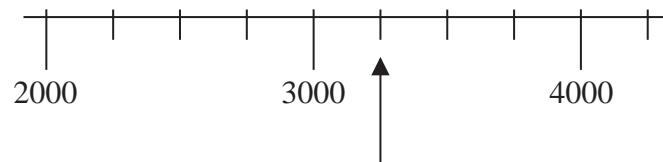
20 Here is a number scale.



(a) On the scale, mark with an arrow (↑) the number 554

(1)

Here is a different number scale.



(b) Write down the number shown marked by the arrow.

3250

(1)

(Total for Question 20 is 2 marks)

21 The table shows the number of steps Polly walked on each of five days.

| Day | Number of steps |
|-----------|-----------------|
| Monday | 8 927 |
| Tuesday | 11 362 |
| Wednesday | 9 653 |
| Thursday | 10 980 |
| Friday | 6 411 |

(a) On which of these days did Polly walk the greatest number of steps?

Tuesday ①

(1)

(b) Write the number 9653 in words.

Nine thousand six hundred and fifty three ①

(1)

(c) Write the number 8927 correct to the nearest ten.

8930 ①

(1)

(d) Write down the value of the 9 in the number 10980

9 hundreds ①

(1)

(e) Work out the sum of the number of steps Polly walked on Thursday and on Friday.

$$\begin{array}{r} 10\,980 \\ + 6\,411 \\ \hline 17\,391 \end{array}$$

17 391 ①

(1)

(Total for Question 21 is 5 marks)

22

| | | | | | |
|----|----|----|----|----|----|
| 20 | 21 | 23 | 25 | 27 | 29 |
|----|----|----|----|----|----|

From the numbers in the box, write down

(a) (i) the even number,

20 (1)

(1)

(ii) the square number.

25 (1)

(1)

| | | | | |
|-------|--------|------|--------|---------|
| prime | square | cube | factor | product |
|-------|--------|------|--------|---------|

(b) Complete the following statements by writing a suitable word from the box on each of the dotted lines.

(i) 343 is the cube of 7

(1)

(ii) 9 is a factor of 63

(1)

(Total for Question 22 is 4 marks)

23 The table shows the mean daytime temperature for each of five planets.

| Planet | Temperature (°C) |
|---------|------------------|
| Jupiter | −160 |
| Mars | −30 |
| Mercury | 430 |
| Neptune | −210 |
| Venus | 470 |

(a) Which of these five planets has the lowest mean daytime temperature?

Neptune

(1)

(b) Work out the difference between the mean daytime temperature for Jupiter and the mean daytime temperature for Venus.

$$470 - (-160) = 630$$

630

(1)

°C

(Total for Question 23 is 2 marks)

- 24 Melanie finds this information about the number of people, in millions, who speak each of five languages as their first language.

| Language | Number of people (in millions) |
|------------------|-----------------------------------|
| Spanish | 480 |
| Greek | 13 |
| Mandarin Chinese | 918 |
| Tamil | 75 |
| Japanese | 128 |

- (a) Which of these languages is the first language of the greatest number of people?

Mandarin chinese (1)

(1)

More people speak Japanese as their first language than speak Greek as their first language.

- (b) How many more? $128 - 13 = 115$

115 (1) million
(1)

The number of people who speak Tamil as their first language is $\frac{1}{4}$ of the number of people who speak Bengali as their first language.

- (c) Work out the number of people who speak Bengali as their first language.

$$75 \times 4 = 300 \quad (1)$$

300 million
(1)

It is estimated that 861 700 people can speak Welsh.

- (d) Write 861 700 in words.

Eight hundred and sixty one thousand , seven hundred . (1)

(1)

(Total for Question 24 is 4 marks)

- 25 (a) Write in figures the number seven thousand and fifty four.

7054 (1)

- (b) Write the number 78263 correct to the nearest 100

78 300 (1)

- (c) Write down the value of the 7 in the number 673 000

70 000 (1)

- (d) Write a number in the box to make the calculation correct.

$$9 \times \boxed{2000} = 18000$$

(1)

- (e) Write a number in the box to make the calculation correct.

$$53.7 \div \boxed{10000} = 0.00537$$

(1)

(Total for Question 25 is 5 marks)

26 Here is a list of numbers.

9 11 13 15 21 60

From the numbers in the list, write down

(a) the even number

60 (1)

(1)

(b) the square number

9 (1)

(1)

(c) the multiple of 7

21 (1)

(1)

(d) the factor of 30

15 (1)

(1)

(Total for Question 26 is 4 marks)