Topics

Integers, inc. rounding – Understanding positive and negative numbers
Calculating with positive and negative numbers

Questions

1.   Toni had **four thousand and forty nine pounds.**

Terri had **seven pounds and one pence.**

Write down, in figures, how much money Toni and Terri each had.

Toni £ …………………

Terri £ …………………
(Total 2 marks)

2.   Write these numbers in order of size.
Start with the smallest number.

(i)   75, 56, 37, 9, 59

....

(ii)   2900, 3951, 10032, 2090, 920

....

(iii)   5, – 8, – 10, 7, – 1, 0

....
(Total 3 marks)

3.   A factory makes three quarters of a million cans each week.

(a)   Write a three quarters of a million using figures.

....

(1)

(b)   Work out the number of cans made in 8 weeks.
Give your answer in millions.

.... million

(2)
(Total 3 marks)

4. Katrin wrote down the temperature at different times on 1st January 2008.

Time	Temperature
midnight	– 4 °C
4 am	–11 °C
8 am	– 2 °C
noon	5 °C
3 pm	6 °C
7 pm	–3 °C

(a) Write down

   (i)   the **highest** temperature,

.......................°C

   (ii)   the **lowest** temperature.

.......................°C

(2)

(b) Work out the difference in the temperature between

   (i)   4 am and 8 am,

.......................°C

   (ii)   3 pm and 7 pm.

.......................°C

(2)

At 11 pm that day the temperature had fallen by 6 °C from its value at 7 pm.

(c) Work out the temperature at 11 pm.

.......................°C

(1)
(Total 5 marks)

5.   Alex has four cards.
Each card has a number written on it.

$$\boxed{1} \quad \boxed{9} \quad \boxed{7} \quad \boxed{6}$$

Alex puts all four cards on the table to make a number.

(a)   (i)   Write the numbers on the cards to show the smallest number Alex can make with the four cards.

$$\boxed{} \quad \boxed{} \quad \boxed{} \quad \boxed{}$$

(ii)   Write the numbers on the cards to show the largest number Alex can make with the four cards.

$$\boxed{} \quad \boxed{} \quad \boxed{} \quad \boxed{}$$

(2)

Alex uses the cards to make a true statement.

(b)   Write the number on the cards to make this true.
Use each of Alex's cards **once**.

$$\boxed{} + \boxed{} = \boxed{} \; \boxed{}$$

(1)

A fifth card is needed to show the result of the multiplication 1976 × 10. She needs a fifth card

(c)   Write the number that should be on the fifth card.

$$\boxed{}$$

(1)
(Total 4 marks)

6.   (a)   Write the number **Twelve thousand, two hundred and nine** in figures.

……………………..
(1)

(b)   Write the number 6074 correct to the nearest hundred.

……………………..
(1)

(c)   Write down the value of the 4 in the number 391 473

……………………..
(1)
(Total 3 marks)

7.

500   600   700
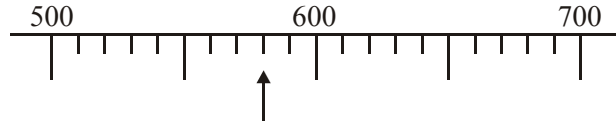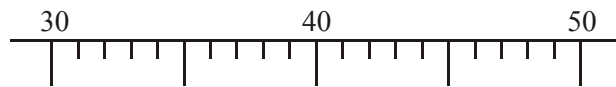
(a)   Write down the number marked with an arrow.

……………………..

(1)

30   40   50
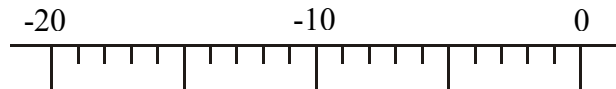
(b)   Find the number 32 on the number line

(Mark it with an arrow (↑).

(1)

-20   -10   0
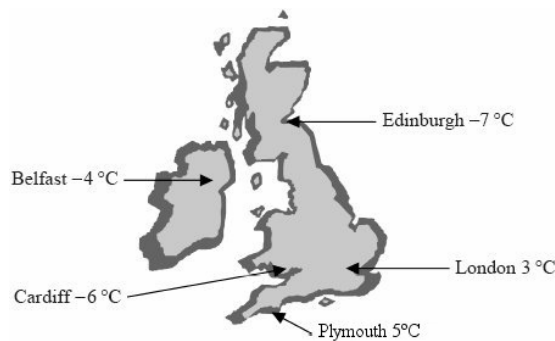
(c)   Find the number -4 on the number line.
       Mark it with arrow (↑).

(1)
(Total 3 marks)

8.   Here is a map of the British Isles.

The temperatures in some places, one night last winter are shown on the map.

Edinburgh −7 °C

Belfast −4 °C

London 3 °C

Cardiff −6 °C

Plymouth 5°C

(i)   Write down the names of the two places that had the biggest difference in temperature.

....

(ii)   Work out the difference in temperature between these two places.

............................°C
(Total 3 marks)

9.

$$D = ut + kt^2$$

$u = 10$
$t = -3$
$k = 7$

(a)   Work out the value of D.

....
(Total 2 marks)

10. $P = x^2 - 7x$

Work out the value of P when $x = -5$

$P =$ ……………
(Total 2 marks)

11.   Calculate

(a) $(4 - 9) - (3 - 8)$

(2)

(b) $\dfrac{4 \times 9}{4 - 10}$

(2)
(Total 4 marks)