Q1.

Here are three expressions.

$\frac{b}{a}$ $\quad a - b \quad$ ab

When $a = 2$ and $b = -6$ which expression has the smallest value?

You **must** show your working.

.....

.....

.....

.....

Answer .....

(Total 2 marks)

Q2.

(a) w and x are **whole** numbers.

$w > 40$

$x < 30$

Work out the **smallest** possible value of $w - x$

.....

.....

.....

Answer .....

(2)

(b) y and z are **whole** numbers.

$y < 60$

$z \leq 50$

Work out the **largest** possible value of $y + z$

.....

.....

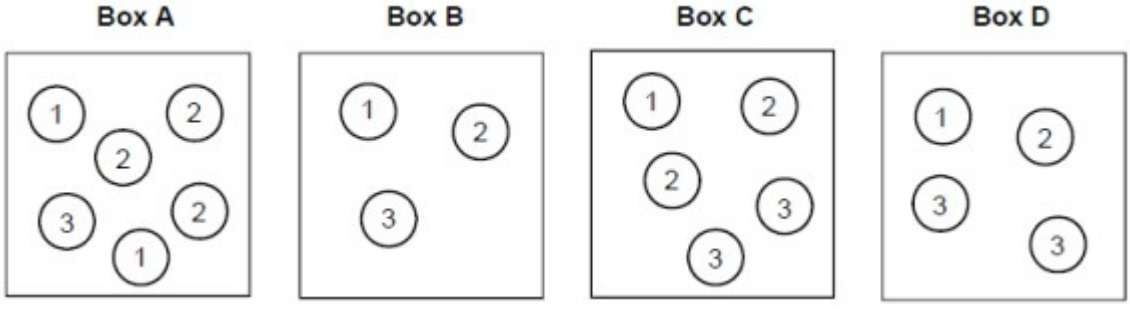
.....

Answer .....

(2)
(Total 4 marks)

Q3.

Boxes A, B, C and D contain balls with numbers on them.



A ball is picked at random from each box.

(a) Which box gives the **greatest** chance of picking a 3?

You **must** show your working.

.....

.....

.....

.....

Box .....

(2)

(b) Which two boxes give the **same** chance of picking a 1?

.....

.....

Box ..... and Box .....

(1)

(Total 3 marks)

Q4.(a) Circle the **two** numbers that add up to 100

21 34 35 65 76

(1)

(b) Circle the **two** numbers that are even.

21 34 35 65 76

(1)

(c) The number 31 is 5 less than the square number 36

Circle the number that is 5 **less** than a square number.

21 34 35 65 76

(1)

(d) Circle the number that is 5 **more** than a square number.

21 34 35 65 76

(1)

(Total 4 marks)

Q5. Put these in order starting with the smallest value.

$\frac{13}{4}$ $3\frac{1}{2}$ 3.15 $\sqrt{9}$

You **must** show your working.

.....

.....

.....

.....

.....

Smallest .....

.....

.....

Largest .....

(Total 3 marks)

Q6. Here is a list of numbers.

255 431 293 388 107 205

(a) Which is the largest number? Circle your answer.

255 431 293 388 107 205

(1)

(b) Which is the even number? Circle your answer.

255 431 293 388 107 205

(1)

(c) Use two of the numbers to make a correct addition.

..... + ... = 400

(1)

(d) Use two of the numbers to make a correct subtraction.

..... – ..... = 50

(1)
(Total 4 marks)

Q7. Here are the temperatures in four places at 7:00 am one morning.

Aberdeen −15.8 °C

London −4.9 °C

Sheffield −7.6 °C

Warwick −5.3 °C

(a) Which place was the warmest?

Answer .....

(1)

(b) What was the difference in temperature between Aberdeen and Warwick?

Answer..... °C

(1)

(c) At 4:00 pm the temperature in Sheffield was 1.7 °C higher than at 7:00 am.

What was the temperature in Sheffield at 4:00 pm?

Answer..... °C

(1)

(Total 3 marks)

Q8.

(a) Work out 1.56 ÷ 0.4

.....

.....

.....

.....

Answer .....

(2)

(b) Write down a **decimal** that is more than $\frac{7}{11}$ and less than $\frac{7}{9}$

.....

.....

.....

.....

Answer .....

(2)

(c) Write down a **fraction** that is more than 41% and less than 42%

.....

.....

.....

.....

Answer .....

(2)
(Total 6 marks)

Q9.(a) Solve $5x - 2 < 6$

.....

.....

Answer .....

(2)

(b) List the whole number values of n that satisfy $1.5 < n \leq 6$

.....

.....

Answer .....

(2)
(Total 4 marks)

Q10. The temperature was recorded at the same time each day.

Day	Mon	Tue	Wed	Thu	Fri	Sat
Temperature (°C)	2	0	1	−3	−1	−2

(a) Which temperature was the coldest?

Answer ..... °C

(1)

(b) How much colder was it on Thursday than on Wednesday?

.....

Answer ..... °C

(1)

(c) On Sunday, the temperature was 3°C lower than on Saturday.

What was the temperature on Sunday?

.....

Answer ..... °C

(1)

(Total 3 marks)

Q11.(a) Write 3.574 to 1 decimal place.

Answer .....

(1)

(b) Put these decimals in order, starting with the smallest.

0.5 0.62 0.325

Answer ..... , ... , ...

(1)

(c) Circle the **two** values that are equivalent to 0.8

8% $\frac{4}{5}$ 80% $\frac{8}{100}$ $\frac{1}{8}$

(2)

(Total 4 marks)

Q12. Arrange these numbers in order of size starting with the smallest.
You **must** show your working.

27% 0.207 $\frac{56}{200}$

.....

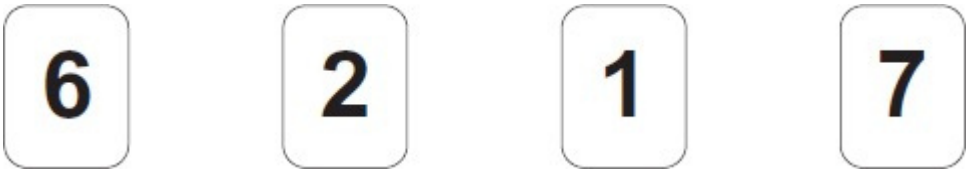
.....

.....

Answer ..... , ... , ...

(Total 2 marks)

Q13. Here are four number cards.



(a) Write the number 6217 in words.

.....

.....

(1)

(b) Write the number 6217 to the nearest 10.

Answer .....

(1)

(c) Use all **four** cards to show the smallest possible number.

(1)

(d) Use all **four** cards to show a number with a value as close to 4000 as possible.

(1)
(Total 4 marks)

Q14. Use a calculator to work out each of the following.

(a) 206 × 13

Answer .....

(1)

(b) 945 ÷ 15

Answer .....

(1)

(c) 489 – (15 × 14)

Answer .....

(1)
(Total 3 marks)

Q15. The number of tickets sold for five football matches is shown.

Match	Tickets sold
1	43 378
2	19 872

3	20 417
4	43 685
5	32 473

(a) At which match were most tickets sold?

Answer .....

(1)

(b) At which match was the number of tickets sold closest to 20 000?

.....

.....

Answer .....

(2)

(c) 3584 of the tickets sold for match 5 were **not** used.

How many tickets were used for match 5?
Give your answer to the nearest thousand.

.....

.....

.....

.....

Answer .....

(3)
(Total 6 marks)