Kent College

11+ MATHEMATICS SAMPLE PAPER

60 minutes

Equipment Required: Pencil and pen

Special Instructions: **All working must be clearly shown** and must be set out in the space provided. Attempt as many questions as you can, in any order.
Calculators may **not** be used**.**
Marks for each question are shown.

Name:
Result:
Comment:

1. Write the number thirty thousand eight hundred and five in figures.

Answer …… [1]

---

2. Write the number 602 174 in words.

Answer ……

…… [1]

---

3. Write down all the factors of 24.

Answer …… [3]

---

4. Fill in the gaps:

(a) 2.2 km = …… meters [1]

(b) 575 ml = …… litres [1]

---

5. Calculate the answer to

(a) $^{-}8 + {}^{+}6$ = ……. [1]

(b) $^{-}7 - {}^{-}3$ = ……. [1]

---

6. Work out each of the following and write your answer in the space provided:

(a) 72 ÷ 9 + 3= …….. [1]

(b) 25 – 3 x 7 = …….. [1]

(c) 36 ÷ (12 - 3) = …… [1]

---

7. Work out:

(a) £8.39 + 63p

Answer …… [2]

(b) £6.00 - £2.79

Answer …… [2]

(c) £3.24 x 17

Answer …… [3]

(d) £29.96 ÷ 7

Answer …… [3]

---

8. Nicole downloaded 6 MP3 albums. Each album cost £8.98 and contained 13 tracks.

(a) How many tracks did she buy?

Answer …… [1]

(b) How much did she pay in total?

Answer …… [1]

---

9. 37 girls are going to a Netball Tournament with 6 adults. Each mini bus holds 17 people. How many minibuses are needed?

Answer …… [3]

---

10. Alice's train leaves at 16:05. She must allow 1 hour and 12 minutes to get to the station. When is the latest she can leave home and still catch the train?

Answer …… [2]

---

11. (a) Write down the next two terms in this

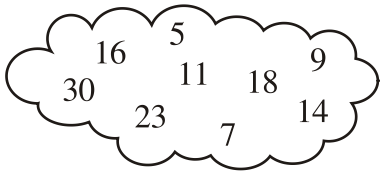
5, 12, 19, 26, ……., ……., [2]

(b) Fill in the missing numbers in this sequence

5, ……., 21, 29, ……45, 53 [2]

---

12. Look at the numbers in the cloud:



Write down **all** the numbers in the cloud that are:

(a) multiples of 3 ..... [1]

(b) prime numbers ..... [1]

(c) factors of 45 ..... [1]

---

13. There are 18 chocolates in a box. $\frac{2}{3}$ are milk chocolate, the rest are plain. How many chocolates are plain?

Answer ..... [2]

---

14. Simplify the following expressions:

(a) $3x - 2y + x + 6y$

(b) $4g + 5 - g -$

Answer ..... [2]

---

15. Calculate:

(a) $2 + 3 \times 4 + 1$ Answer ……[1]

(b) $4 \times 11 - 28 \div 7$ Answer ……[2]

(c) $48 \div (14 - 2)$ Answer ……[2]

---

16. 9 girls were asked how many pets they had. These are their results.

7, 5, 1, 5, 4, 3, 5, 7, 8

Find the mode, median, mean and range.

The mode is …….. [1]

The median is …….. [2]

The mean is …….. [2]

The range is …….. [1]

---

17. Work out the following:

(a) 40% of £200

Answer …… [2]

(b) 35% of 500g

Answer …… [2]

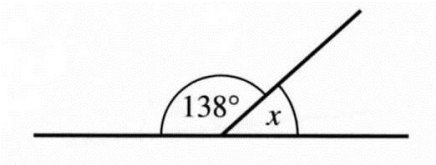
18. Harriet thought of a number. She added 4 and then multiplied by 3. She added 6 to her answer and then divided by 4 to get 9. What number did Harriet first think of?

Answer …… [3]

19. Jess went out hunting for ladybirds. She collected some with 7 spots and some with 10 spots. If she collected 9 ladybirds with a total of 72 spots between them, how many had 7 spots and how many had 10 spots?

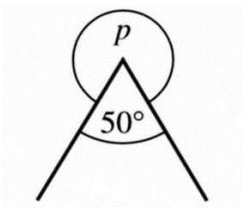
Answer 7 spots: …… 10 spots: …… [3]

20. (a) Work out the angle marked *x*.



x = ……° [1]

(b) Work out the angle marked *p*.



P = ……..° [1]

21. Solve these equations:

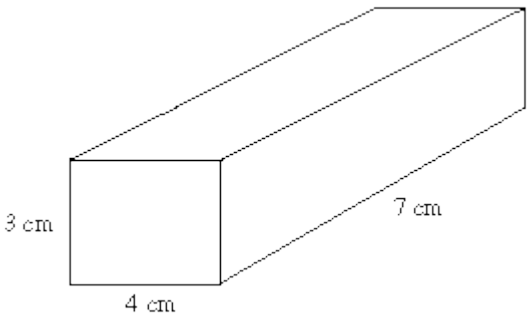
(a) $x + 4 = 7$ x = ……[1]

(b) $3y = 15$ y = ……[1]

(c) $\frac{p}{4} = 5$ p=……[1]

(d) $7 - n = 9$ n= ……[1]

22. Find the volume of



Answer ……[2]

END OF EXAMINATION