8 + Entrance Examination

Paper 3

Numeracy / Maths

Total marks: 77

Time allowed: 40 minutes

Full name ....

1. **Write the number 5067 in words.**

_____ (1 mark)

2. **Write the number 9001 in words.**

_____ (1 mark)

3. **Complete the missing numbers in the sequences below:** (5 marks)

    a. 350, 340, 330, 320, _____ , _____

    b. 61, 71, 81, 91, _____ , _____

    c. 34, 38, 42, 46, _____ , _____

    d. 112, 113, 115, 118, 122, _____ , _____

    e. 45, 50, 48, 53, 51, 56, _____ , _____

4. **Write these numbers in order of value from smallest to largest:**

    9001   8119   8091   9081   9000   8919

    _____ (1 mark)

5. **Round these numbers to the nearest 10:**

    a. 73 _____ (1 mark)

    b. 185 _____ (1 mark)

6. **Round these numbers to the nearest 100:**

   a. 831 _____ (1 mark)

   b. 555 _____ (1 mark)

7. **Round these numbers to the nearest 1000:**

   a. 7844 _____ (1 mark)

   b. 5050 _____ (1 mark)

8. **Use any method you choose to answer the following questions. You can show your working on the right hand side of the page.**

   a. 456 + 127 = _____ (2 marks)

   b. 8 x 6 = _____ (2 marks)

   c. 9 x 7 = _____ (2 marks)

   d. 872 - 25 = _____ (2 marks)

   e. 82 x 3 = _____ (2 marks)

9. **68 passengers are going on a coach trip. Each coach seats 20 people. How many coaches will be required to take all the of the passengers?**

_____ (2 marks)

10. **Use the written method of division to answer the question below, giving a remainder in your answer if necessary. Write your final answer on the line next to the question.**

$6\sqrt{78}$ _____ (2 marks)

11. **A parcel weighs 64 kilograms. How much will 3 parcels weigh?**

_____ (2 marks)

12. **Joe had £120. He spent a third of his money on a computer game. How much did the computer game cost?**

_____ (2 marks)

13. **How much larger is 504 than 4?** _____ (1 mark)

14. **What number is 10 less than 103?** _____ (1 mark)

15. **Write four number sentences replacing △ and ◯ with <u>different</u> numbers.** (2 marks)

△ + ◯ = 12

- _____

- _____

- _____

- _____

16. **In questions a to f work out the answers and write your answers on the line. You can show your working, on the right hand side, if you wish.** (12 marks)

a. 63 x 100 = _____

b. 3600 ÷ 20 = _____

c. 34 + _____ = 25 + 39

d. 6 x 5 = _____ x 3

e. 50 + 15 = _____ - 12

f. 22 x 5 = _____ x 11

17. How much heavier is Box 1 than Box 2?
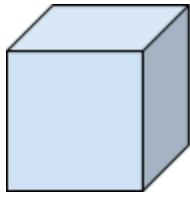
Box 1
452g
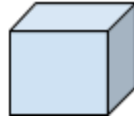
Box 2
228g

_____ (2 marks)

18. Harriet's dad goes to the supermarket at 16:20 and returns at 18:10. How long did his supermarket trip take? Give your answer in hours and minutes.

_____ (2 marks)

19. Ethan eats $\frac{4}{10}$ of his birthday cake. His sister eats $\frac{2}{10}$ of his birthday cake. (2 marks)

a. How much cake have the children eaten altogether? _____

b. How much of the cake is left for the rest of the family? _____

20. On the line below, write the analogue time, in words, that the digital clock face is showing.

_____ (1 mark)

21. I double a number and then add 9. The answer is 41.

What is the number? _____ (2 marks)

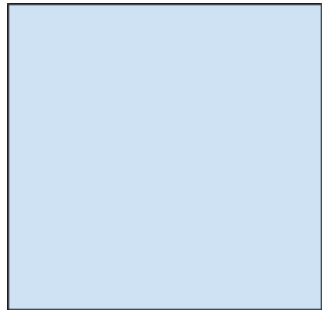**22.** I multiply a number by 4 and then add 6. The answer is 38.

What is the number? _____ (2 marks)

23. Draw all possible lines of symmetry on the following shapes: (2 marks)

a.

b.

24. A box of building blocks contains only yellow blocks, blue blocks, green blocks and red blocks. Half of the blocks are blue. There are also 3 yellow blocks, 2 green blocks and 5 red blocks. How many blocks are there altogether?
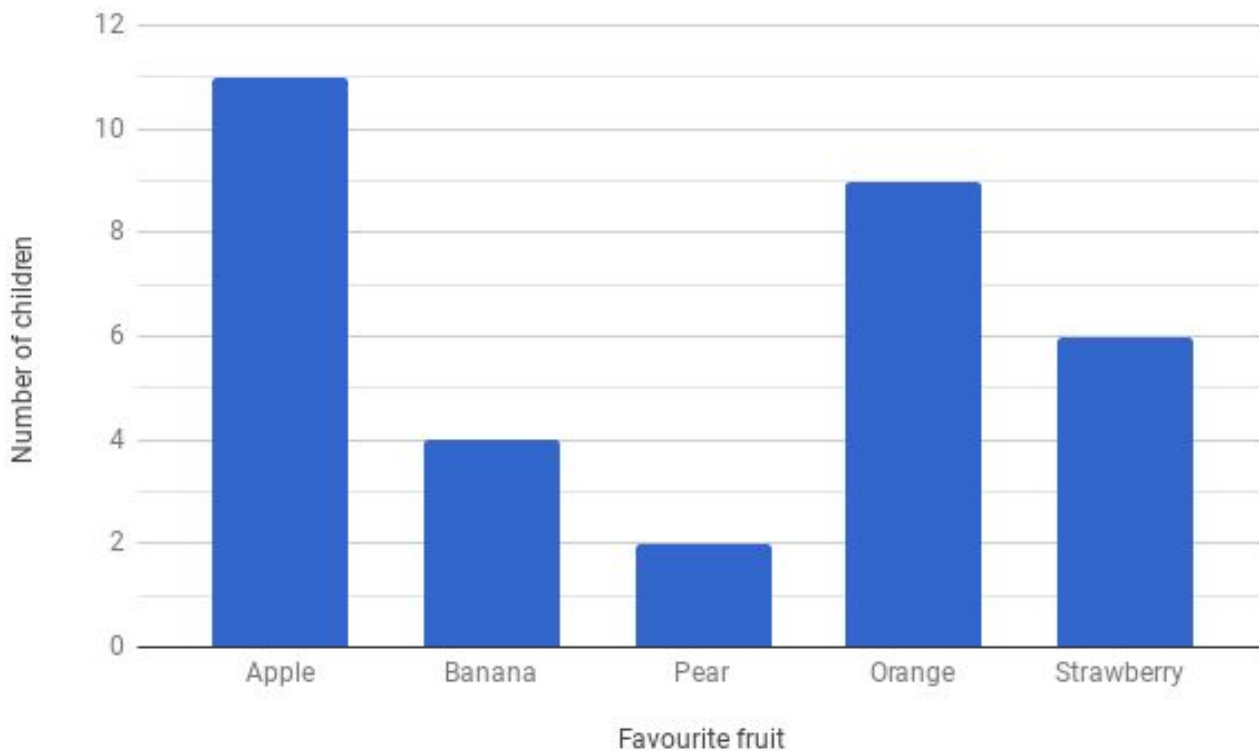
_____ (2 marks)

25. What is $\frac{3}{4}$ of 48?

_____ (1 mark)

26. Write $\frac{18}{24}$ in its simplest form.

_____ (1 mark)

27. A class of children voted on their favourite fruit. The results are recorded in the bar chart below. (4 marks)

a. How many children chose an orange as their favourite fruit?

_____

b. Which was the most popular fruit? _____

c. How many more children chose strawberries than pears? _____

d. What is the total number of children that voted on their favourite fruit?

_____

28. **Jayden is 134 cm tall. Michaela is 29 cm taller than Jayden. How tall is Michaela?**

_____ (2 marks)

29. **Isabel had to write a story of 400 words. On the first day she wrote 26 words. On the second day she wrote 118 words. How many words has she got left to write?**

_____ (2 marks)

30. **Train tickets cost £8 for a child and £15 for an adult. If Mum has £80 pounds cash and then buys tickets for 2 adults and 4 children, how much money does she have left over?**

_____ (2 marks)

31. There are 87 children that want to go on a trip, but only 6 coaches to take them. If each coach seats 14 children, how many children will not be able to go on the trip?

_____ (2 marks)

8 + Entrance Examination
Paper 3
Mathematics Marking Scheme

Total marks: 77

For questions where two marks are available, one mark should be awarded for a correct answer, and one mark given for showing working.

1. Five thousand and sixty seven
2. Nine thousand and one

3.
   a. 310, 300
   b. 101, 111
   c. 50, 54
   d. 127, 133
   e. 54, 59

4. 8091, 8119, 8919, 9000, 9001, 9081

5.
   a. 70
   b. 190

6.
   a. 800
   b. 600

7.
   a. 8000
   b. 5000

8.
   a. 583
   b. 48
   c. 63
   d. 847
   e. 246

9. 4
10. 13
11. 192 kg
12. £40
13. 500
14. 93
15. Any four of the following combinations: 1+11, 2+10, 3+9, 4+8, 5+7

16.
    a. 6300
    b. 180
    c. 30
    d. 10
    e. 77
    f. 10

17. 224g
18. 1 hour 50 minutes

19.
    a. $\frac{6}{10}$ or $\frac{3}{5}$
    b. $\frac{4}{10}$ or $\frac{2}{5}$
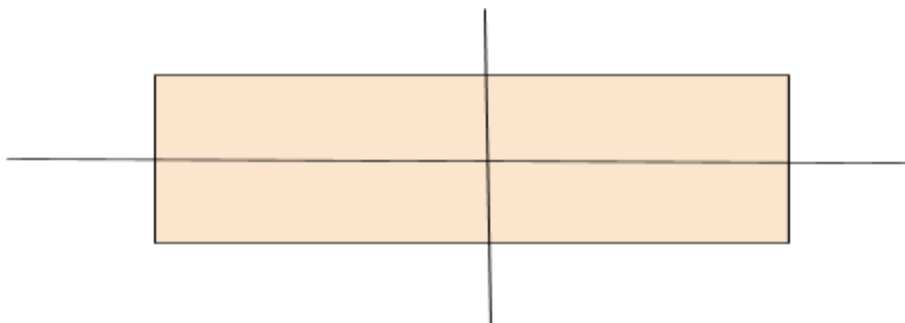
20. Forty five minutes past twelve or A quarter to one
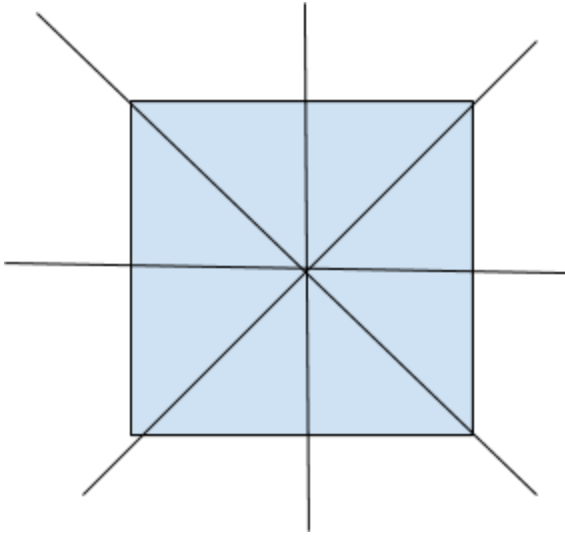21. 16
22. 8

23.
    a.

b.

24. 20 blocks
25. 36
26. $\frac{3}{4}$

27.
    a. 9
    b. Apple
    c. 4
    d. 32

28. 163cm
29. 256
30. £18
31. 3