

### 11 Plus

## Paper [ 9 ] Maths Non-Calculator

# Total marks: [ 40 ] Time allowed: 60 minutes

### Instructions

You have 1 hour.

There are 40 marks available. Try to answer all the questions. Remember to show your working out.

No calculators are allowed.

Full name \_\_\_\_\_



#### Questions

1. Barry and his family are going to the theatre. The tickets are  $\pm 24.50$  for adults and  $\pm 12$  for children. The total price of the tickets is  $\pm 60.50$ . How many adults and how many children (including Barry) are in his family? You must show your working out. (3 marks)

2. 250 people attended a concert. 40% of them were adults. How many were children? Give your answer as a number, not a percentage. (2 marks)

3. Angel is 16 years older than her nephew Tom. Tom is four years younger than Angel's sister Martha. If Angel was born in 1999, when was Martha born? (2 marks)



4. What is

a. 10 x 3.5?

- b. 100 x 4.92?
- c. 990 ÷ 11?

d. 9.92 – 0?

e. 12 + 3.23?

Total for Question 4 = 5 marks

5. a. Chris wants to buy three rubbers and four compasses. Rubbers cost r pence and compasses cost c pence. Write an equation in terms of the cost (£) to show how much he will spend. (2 marks)

b. If compasses cost £1 and the total cost of Chris's purchase is £5.50, how much do rubbers cost? (2 marks)



6. Fill in the missing numbers in these sequences:

a. 2, 4 \_\_\_\_\_ 8, 10

- b. 1, 3, 9, 27, \_\_\_\_\_
- c. 1, 4, 9, \_\_\_\_, 25
- d. 110, 100, 80, 50, \_\_\_\_\_

e. 1, 2, 3 \_\_\_\_\_, 8, 13

7. Rupal has to be at his tennis match at 10.30am. He wakes up at 8.20am. How many minutes does he have before he has to be at tennis? (2 marks)

8. If one angle in a isosceles triangle is 64°, what are the possible sizes of the other two angles? (2 marks)

9. Year 6 has 48 children in it. Joshua does a survey to find out their favourite colour. His results are below but some numbers are missing. Can you fill them in?

Colour	Pink	Red	Yellow	Blue	Green
Girls		10	8	5	1
Boys	2		7		
Total	7	14		10	

Total for Question 9 = 6 marks

10. Barnaby records his team's football matches over six weeks. He accidentally forgets to record the sixth week but knows that the mean number of goals scored was 8.



a. Here are the scores. Fill in the sixth week.

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
7	5	9	10	9	

b. What is the mode?

c. What is the range?

Total for Question 10 = 5 marks

11. A cube has volume 343cm<sup>3</sup>. Another cube has a total surface area of 216cm<sup>2</sup>. What is the difference in the length of their sides? (4 marks)





Answers

1. One adult and three children

2. 150 people.

3. 2011

4. a. 35 b. 492 c. 90 d. 9.92 e. 15.23

5. a. 3r + 4c b. £1.50

6.a. 6 b. 81 c. 16 d. 10 e. 5

7. 130 minutes (1 mark for 2 hrs 10 mins)

8. 64° or 58°

<u>9</u>.

Colour	Dink	Pod	Vollow	Blue	Groop
Coloui	FILIN	neu	TEIIOW	Diue	
Girls	5	10	8	5	1
Boys	2	4	7	5	1
Total	7	14	15	10	2
			1.11		
10. a. 8	b. 9	c. 5			

11. 1cm