



11 Plus Maths

Paper 5

Total marks: 65
Time allowed: 1 hour

Full name

Write your answers to each question along with all of your working in the spaces provided beneath each question.

Good luck!

1. Calculate the answers to the following 4 questions:

a) $48 + 37 =$ _____

b) $63 - 24 =$ _____

c) $89 \times 7 =$ _____

d) $64 \div 3 =$ _____

_____ (8)

2. On a visit to the supermarket I am looking for oranges. They cost 7p each so how many can I buy with my £1.33?

_____ oranges (2)

3. If the 15:45 school bus left school 19 minutes late, at what time did it leave?

_____ (2)

4. How much should I receive in change from the shop owner if I spend £12 . 87 in their shop when I give them a £20 note?

_____ (2)

5. What is the volume of a box of tissues which measures 17cm by 9cm by 2 cm?

_____ (2)

6. Calculate the area of a square whose perimeter measures 36cm.

_____ (2)

7. Write 23 tenths as a decimal.

_____ (2)

8. Express the number 72 as a pair of numbers multiplied together in two different ways:

_____ and _____ OR _____ and _____ (2)

9. How many 7 a-side teams can be made from 4 classes of 21 children?

_____ teams (2)

10. How many hours are in total during April, June and November?

_____ hours (2)

11. What is the product of 12 and 13?

_____ (1)

12. Which of the following letters will look exactly the same when rotated through 180 degrees about their centre point?

P I C H X

_____ (2)

13. What percentage of 2 kg is 250g?

_____ % (2)

14. If I roll two fair dice, which of the scores, 3 , 7 and 12 am I less likely to get?

_____ (2)

15. A large pizza serves 4 people and needs 75 grams of cheese to make it. If I want to have enough pizza for 16 people , how many grams of cheese will I need?

_____ grams (4)

16. On an Ordnance Survey map 8 cm represents 1 kilometre. How many millimetres on the map represent 375 metres?

_____mm (2)

17. Given that $456 \times 87 = 39672$, what is the value of 2.28×0.87 ?

_____ (2)

18. At a birthday party a tin of sweets was divided equally between 4 boys and each of them were given 24 sweets each. If the same tin of sweets was divided equally between 6 boys how many sweets would each boy receive?

_____sweets (3)

19. Edward purchased 8 trees and 3 roses from the garden centre. Mike bought 8 roses and 3 trees from the same garden centre. Edward paid £1.25 more than Mike did. How much was a tree if each rose cost 45p?

_____ pence (3)

20. A container has a mass of 8 kilograms when full of ice-cream, and it has a mass of 4.5 kilograms when half of the ice-cream has been eaten. What will its mass be when a quarter of the ice-cream remains?

_____ kg (4)

21. An empty rectangular tank with a base area of 2400cm^2 is being filled with fuel from two taps. One of the taps can fill with 12 litres of fuel per minute and the

Second tap can do it in 3 litres less per minute.

(a) What will be the depth of fuel in the tank after both taps have been on for 6 minutes?

(b) If fuel leaks from the tank at a rate of 2 litres per minute for 6 minutes, what will be the depth of fuel in the tank?

Answers: (a) _____ cm (2)

(b) _____ cm (2)

22. In the UK maths challenge you gain 5 marks for a correct answer, you lose 2 marks for an incorrect answer and you lose no marks if you simply leave a question out.

If a challenge has 25 questions in total and Daniel gets 11 correct answers and leaves 7 questions unanswered: what score does Daniel achieve?

_____ (3)
23. In a scalene triangle which has angles of x° , y° and z° if the mean of x and y is z , what is the value of z ?

_____ (3)
24. Sir Know-it-all has lots of tables and chairs ready for a banquet. Each round table can seat 8 guests and each rectangular table can seat 6 guests. If there are 35 guests arriving what is the smallest number of tables that he can use so that all seats are sat in around each table used?

_____ (4)
Total / 65

Answers:

1. a) 85
b) 39
c) 623
d) 21 remainder 1 **OR** 21.33333... **OR** $21\frac{1}{3}$.
2. 19 oranges
3. 16 : 04
4. £ 7 . 13
5. 306 cm²
6. 81 cm²
7. 2 . 3
8. 8 and 9 , 12 and 6 , 4 and 18 , 3 and 24 , 2 and 36
9. 12 teams
10. 2160 hours
11. 156
12. I, H, X
13. 12.5%
14. 12
15. 300 grams
16. 30 mm
17. 1.9836
18. 16 sweets
19. 70 pence

20. 2.75 kg

21. a) 52.5 cm
b) 47.5 cm

22. 41

23. 60°

24. 5