

TutorMate 11+ Maths Question Paper

- 1 Write 3760 grams in kilograms.
- 2 Write 19 litres in millilitres.
- 3 Write 2 kilometres in centimetres.
- 4 Write 51 litres in centilitres.
- 5 Write 4 millimetres in metres.
- 6 What is 0.7 as a percentage?
- 7 What is $\frac{4}{16}$ as a decimal?
- 8 What is 0.2 as a fraction?
- 9 What is 60% as a fraction?
- 10 What is $\frac{3}{10}$ as a percentage?

Work out the following, using the order of operations.

- 11 $(4 \div 2) + 3 \times 2$
- 12 $10 \times 5 + 4 - 1$
- 13 $36 \div 6 \times (3 + 2)$
- 14 $(81 - 9) \div 8$
- 15 $6 \times 7 + (6 \div 2 + 4)$

Write the exact answer to each calculation.

- 16 $216 \div 9$
- 17 54×6
- 18 432×5
- 19 $1224 \div 8$
- 20 85×4

Circle the correct answer in the following multiple-choice questions.

21 Which of the following is the smallest?

- A) 11 B) $\frac{11}{100}$ C) 0.011 D) 0.0101 E) 0.101

22 One of the angles in an isosceles triangle is 70° . Which of the following is a possible other angle in the triangle?

- A) 60° B) 45° C) 50° D) 70° E) 55°

23 What is the value of 6 in 88.6752

- A) Six B) Six thousandths C) Six tenths D) Six hundredths E) Six tens

24 What is the missing number in the following equation? $(4 \times \underline{\quad} + 7) \div 9 = 3$

- A) 6 B) 4 C) 3 D) 5 E) 7

25 Two-thirds of children chose ice cream instead of fruit. What is the ratio of ice cream to fruit?

- A) 1:5 B) 2:1 C) 2:3 D) 1:3 E) 3:2

Solve the following fraction equations. Give your answer as a fraction.

26 $\frac{3}{7} \times \frac{4}{5}$

27 $\frac{1}{6} + \frac{2}{4}$

28 $\frac{4}{5} - \frac{2}{3}$

29 $\frac{7}{12} \div \frac{3}{4}$

30 $\frac{12}{210} \times \frac{5}{6}$

George makes a note of how many letters he is delivered every week. The number of letters each week is as followed: 8, 8, 4, 5, 3, 6, 6, 8, 5, 7.

31 What is the mean number of letters received?

32 What is the range of the number of letters received?

33 What is the median number of letters received?

34 What is the modal number of letters received?

35 It was George's birthday on the 11th week which meant he got more letters than usual. The mean number of letters increased to 7. How many letters did he receive in the 11th week?

Write the new co-ordinates if each of these points is reflected in the y axis.

36 (5, 3)

- 37** (-7, 6)
- 38** (9, -4)
- 39** (-2, -2)
- 40** (0, 0)

Solve the following problems.

- 41** The time in Tokyo is 9 hours ahead of the time in London. A plane from London Gatwick Airport leaves at 20:00 and arrives in Tokyo 11 hours later. What is the time in Tokyo when the plane arrives?
- 42** Michael is having a BBQ and wants to make burgers. Burger meat costs £4 for a pack of 6 and buns cost £2 for a pack of 4. Michael wants to buy the smallest number of packets that will allow him to have an equal amount of burger meat and buns. How much will this cost?
- 43** The train from London Victoria to Peckham Rye takes 15 minutes and covers a distance of 8 kilometres. How fast does the train travel? Give your answer in kilometres per hour.
- 44** A gardener wants to fill an area with cement. The length of the area is 11 metres and the width is 7.5 metres. A bag of cement is able to cover 2m^2 . How many bags of cement are needed to cover the whole area?
- 45** An orange tree grows 174 oranges. However, 28 of these oranges are unripe. How many people can have 4 ripe oranges each?
- 46** Rahul can hear the sound of ship's horn as he sits on the beach. The speed of sound is 343m/s and it takes 3 seconds for the sound to travel from the ship to Rahul. How far away is the ship in kilometres?
- 47** A library is moving to a new location and needs to transport its 4510 books. The books are put into boxes which are able to hold 30 books each. How many boxes are needed to transport all of the books?
- 48** A games company have made a new game that it is expected to sell 1,000,000 copies. The game cost £10,000,000 to make and the company want to make a profit that is twice as much as this. How much should they sell each game for?
- 49** The bus to Leicester Square comes every 15 minutes starting at 9:00am and the Tube comes every 4 minutes starting from 9:06am. What is the earliest time that the bus and the Tube will come at the same time?
- 50** 1kg of chips is fried in 500ml of oil. Oil comes in 2L bottles and costs £2.80 per bottle. Chips come in 1kg bags that cost £1.80 each. How much would it cost to fry 8kg of chips in oil?