

11 Plus

Maths - Test Paper 3

On the Education Quizzes website, you will find **70 x 11-Plus Maths Quizzes** to help you prepare for the mathematics section of the 11-Plus

This paper contains 32 questions.

The total marks for this paper is 59.

Time Allowed: 1 hour



Instructions

- Use **black** ink or ball-point pen.
- Answer **all** questions.
- Answer the questions in the spaces provided.
- **Calculators must not be used.**

Information

- The total mark for this paper is 59.
- The marks for each question are shown in the right hand column with each question.
- Some questions have a method box like the one below.
- Show your working out in the space around the 'Answer' box..

[illegible]

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- If you cannot do a question, go to the next one and come back to it later.
- Check your answers if you have time at the end.
- If you finish early, go back and check your work.



[illegible][illegible]

Find the difference between 7.22 and 2.97

Answer

5

Calculate 56×120

Answer

1 Mark

Calculate 56×120

Answer

[illegible]

What is the result of 17 multiplied by 4.04?

Answer

1 Mark

Calculate $208 \div 13$

[illegible]

Divide 18 by 0.3

[illegible]
$$57 + 762 = 8?9$$

[illegible]

12

$12 - 1? = -6$

1 Mark

Answer

1 Mark

Insert answers in red box and show method where required.

13

$$25 \times 1?2 = 3300$$

A full-page sheet of white graph paper with a light gray grid. On the right side, there is a red-outlined rectangle. Inside this rectangle, the word "Answer" is written in a bold, red, sans-serif font.

Answer

1 Mark

14

$$1.8 \div 2 = 0.?$$

[illegible]

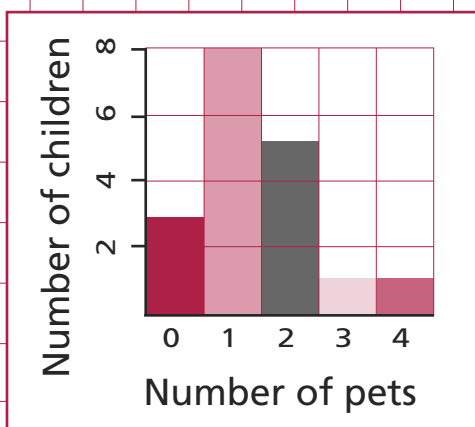
Answer

1 Mark



15

Some children made a graph to show how many pets they had.



A) How many children had 1 pet?

Answer

1 Mark

B) How many children had more than 2 pets?

Answer

1 Mark

C) How many pets were there in total?

Answer

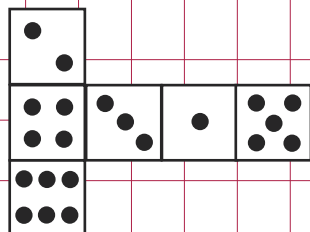
1 Mark



16

This question includes diagrams showing the net of three different unfolded dice. In each part of the question, based on the net illustrated, indicate how many dots would appear on the face opposite the 3.

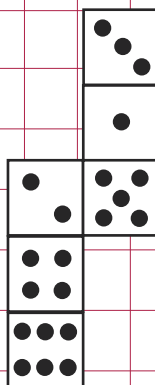
A)



Answer

1 Mark

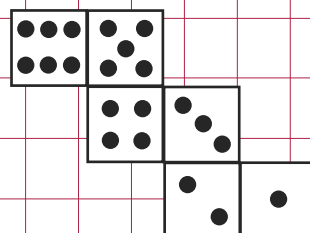
B)



Answer

1 Mark

C)



Answer

1 Mark

18

Write $\frac{1}{8}$ as a percentage.

Answer

1 Mark

19

A) A train leaves London at 21.15 and reaches Aberdeen at 05.00 the next morning.
What is the train journey time?

Answer

1 Mark

B) A jet leaves London at 21.15 and takes 11 hours and 35 minutes to fly to Hong Kong. Hong Kong is 7 hours ahead of London. Work out the local time in Hong Kong when the flight lands using the 24 hour clock.

Answer

1 Mark



20

In each of the following calculations there is an error, which can be corrected by changing one digit to the number 6. In each case identify that digit.

A. $97 - 52 = 41$

Answer

1 Mark

B. $51 + 39 + 80 = 175$

Answer

1 Mark

C. $253 + (8 \times 23) = 447$

Answer

1 Mark

21

Fill in the missing numbers from these sequences:

A. 18, 25, 32, _____, 46, _____

Answer

1 Mark

B. 5, 9.5, 14, _____, _____, 27.5

Answer

1 Mark



22

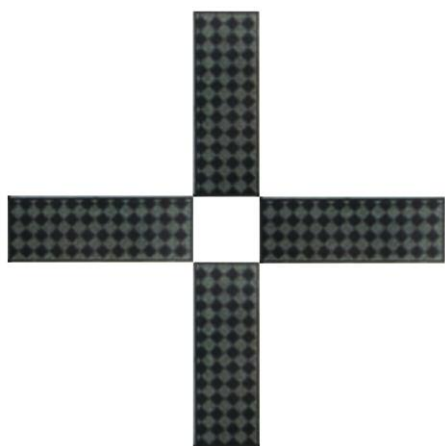
By how much is four and a half greater than three and seven eighths? Write your answer as a fraction.

Answer

1 Mark

23

Michael has four rectangular tiles which she arranges as shown below, leaving a square hole in the middle of the tiles.



The hole in the middle has an area of 400cm squared.

A. Calculate the width of one of the tiles.

Answer

1 Mark

The area of the four tiles combined is 12 times as large as the area of the hole in the middle.

B. Calculate the length of one of the tiles.

Answer

1 Mark

C. Work out the perimeter of one of the tiles.

Answer

1 Mark

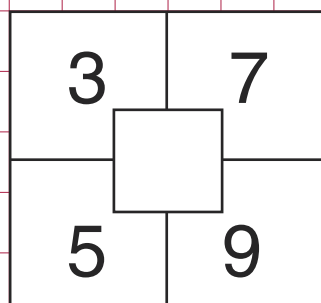
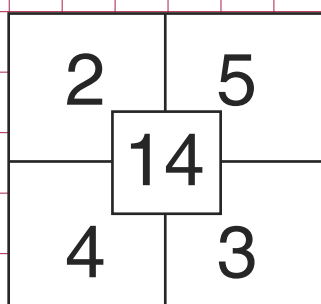


24

In each of the grids below, the numbers in the four squares around the middle square must be added together to give the number in the centre.

For example, $2+5+4+3=14$.

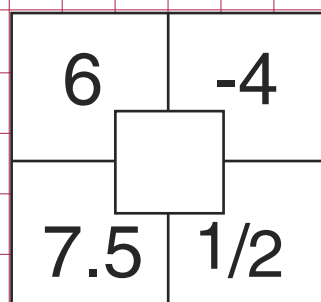
Complete the three grids below with the correct number into each of the relevant squares.



A)

Answer

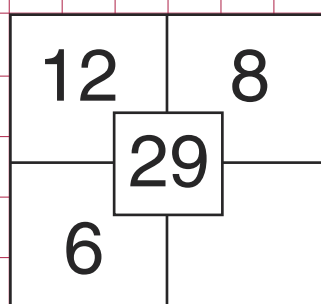
1 Mark



B)

Answer

1 Mark



C)

Answer

1 Mark



25

Carole has 30 loose socks of assorted colours in her drawer. A third of them are white, and of the non whites remaining, two fifths are blue. The rest are all red.

A. Work out how many blue socks she finds.

Answer

1 Mark

B. Write down how many pairs of red socks she could make.

Answer

1 Mark

26

21 is the sum of three different prime numbers

$$21 = 5 + 13 + 3$$

Show which numbers between 9 and 19 inclusive can be written as the sum of 3 different prime numbers, writing your answer in the space at the bottom. If it is not possible, cross it out.

9 = _____ (1mark)

10 = _____ (1mark)

11 = _____ (1mark)

12 = _____ (1mark)

13 = _____ (1mark)

14 = _____ (1mark)

15 = _____ (1mark)

16 = _____ (1mark)

17 = _____ (1mark)

18 = _____ (1mark)

19 = _____ (1mark)



- 27 Toby thinks of a number. 20% of his number is 64.
What is 75% of his number?

Answer

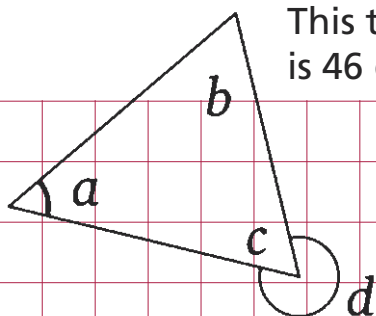
1 Mark

- 28 The yearly charge, C in pence, for water can be found by using the formula $C = 150u + 650$, where u is the number of units of water used during the year.
Find the yearly charge in pounds if 95 units of water are used.

Answer

1 Mark

- 29 This triangle has angles a , b , c and d . Angle b is 46 degrees and angle c is 68 degrees.



A) What is the size of angle a ?

Answer

1 Mark

B) What is the size of angle d ?

Answer

1 Mark

30

I am half as old as my sister. In six years time she will be 22.
How old am I?

[illegible]

Answer

1 Mark

31

Steaks cost £4.99 each. A chef buys 125 for his restaurant. What is the total cost?

[illegible]

Answer

1 Mark



32

Solve the following equations:

A) $3x \underline{\hspace{2cm}} = 42$

Answer

1 Mark

B) $3x \underline{\hspace{2cm}} - 9 = 51$

Answer

1 Mark

C) $10 + \underline{\hspace{2cm}} = -2$

Answer

1 Mark

D) $0.1x \underline{\hspace{2cm}} = 50$

Answer

1 Mark



Answers

- 1) 2218(1 mark)
- 2) 31.18(1 mark)
- 3) 1783(1 mark)
- 4) 4.25(1 mark)
- 5) 6720(1 mark)
- 6) 68.68(1 mark)
- 7) 16(1 mark)
- 8) 60(1 mark)
- 9) 1(1 mark)
- 10) 9(1 mark)
- 11) 5(1 mark)
- 12) 8(1 mark)
- 13) 3(1 mark)
- 14) 9(1 mark)
- 15a) 8(1 mark)
- 15b) 2(1 mark)
- 15c) 25(1 mark)
- 16a) 5(1 mark)
- 16b) 5(1 mark)
- 16c) 6(1 mark)
- 17) 0.24(1 mark)
- 18) 12.5%(1 mark)
- 19a) 7 hours 45 mins(1 mark)
- 19b) 15.50(1 mark)
- 20a) 2(1 mark)
- 20b) 1(1 mark)
- 20c) 5(1 mark)
- 21a) 39, 53(1 mark)
- 21b) 18.5, 23(1 mark)
- 22) $\frac{5}{8}$ (1 mark)
- 23a) 20(1 mark)
- 23b) 60(1 mark)
- 23c) 160cm or 1.6m(1 mark)

- 24a) 24(1 mark)
- 24b) 10(1 mark)
- 24c) 3(1 mark)
- 25a) 8(1 mark)
- 25b) 4 pairs(1 mark)
- 26) 9 (can't be done)(1 mark)
- 10 = 2+3+5(1 mark)
- 11 (can't be done)(1 mark)
- 12 = 2+3+7(1 mark)
- 13 (can't be done)(1 mark)
- 14 = 2+5+7(1 mark)
- 15 = 3+5+7(1 mark)
- 16 = 2+3+11(1 mark)
- 17 (can't be done)(1 mark)
- 18 = 2+3+13 or 2+5+11(1 mark)
- 19 = 3+5+11(1 mark)
- 27) 240(1 mark)
- 28) £149.00(1 mark)
- 29a) 66(1 mark)
- 29b) 292(1 mark)
- 30) 8(1 mark)
- 31) £623.75(1 mark)
- 32a) 14(1 mark)
- 32b) 20(1 mark)
- 32c) -12(1 mark)
- 32d) 500(1 mark)

