| Surname | Other | names |
|--|--------------------|------------------|
| irade One Paper evel 1 / Level 2 GCSE | Centre Number | Candidate Number |
| 9-1) | | |
| Mathema | atics Rev | vision H |
| Mathema | atics Rev Grade | vision H |
| Mathema | atics Rev Grade | 1 - 3 |

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your surname and first name in the correct boxes.
- Answer **all** questions.
- Answer the questions in the spaces provided there may be more space than you need.
- You must show all your working.
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- Calculators may be used but you must show your working out.

Information

- The total mark for this paper is 150
- The marks for each question are shown in brackets
 use this as a guide as to how much time to spend on each
 - question.

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

Answer ALL questions.

Write your answers in the spaces provided.

You must write down all the stages in your working.

| | Write the | followi | ng numt | pers in or | der of si | ze | |
|---|-----------|--|---|---|--|---|--|
| | -6 | 6 | 0 | -3 | -1 | | |
| | | | | | | | (1) |
| 2 | Write | the foll | lowing n | umbers i | n order o | of size | |
| | 12 | -8 | 7 | -5 | -9 | | |
| | | | | | | | |
| | Chan | ge 25 m | m into c | entimetr | es | | (1) |
| | | | | | | | |
| | Chan | ge 8 mn | n into ce | ntimetre | S | | (1) |
| | | | | | | | |
| | Chan | ge 4 cm | into mil | limetres | | | (1) |
| | | | | | | | |
| | Chan | ge 9 cm | into mil | limetres | | | (1) |
| | | | | | | | |
| | Write | down t | the seve | nth odd r | number | | (1) |
| | | | | | | | |
| | Write | down t | the twelf | th even i | number | | (1) |
| | | | | | | | |
| | 2 | Write the -6 2 Write 12 Chang Chang Chang Chang Write Write | Write the following -6 6 2 Write the following 12 -8 Change 25 mm Change 8 mm Change 4 cm Change 9 cm Write down 1 Write down 1 | Write the following number -6 6 0 2 Write the following number 12 -8 7 12 -8 7 Change 25 mm into ce Change 8 mm into ce Change 4 cm into mil Change 9 cm into mil Write down the seven Write down the seven Write down the twelf Write down the twelf | Write the following numbers in or -6 6 0 -3 2 Write the following numbers in 12 -8 7 -5 12 -8 7 -5 -5 Change 25 mm into centimetre Change 8 mm into centimetre Change 4 cm into millimetres Change 9 cm into millimetres Write down the seventh odd no Write down the seventh odd no | Write the following numbers in order of si -6 6 0 -3 2 Write the following numbers in order of 12 12 -8 7 -5 -9 Change 25 mm into centimetres Change 8 mm into centimetres Change 4 cm into millimetres Change 9 cm into millimetres Write down the seventh odd number Write down the twelfth even number | Write the following numbers in order of size -6 6 0 -3 -1 2 Write the following numbers in order of size 12 -8 7 -5 -9 12 -8 7 -5 -9 |

| 9 | | Write down the fifteenth odd number | |
|----|---|--|-----|
| 10 | | Below is a list of numbers | (1) |
| | а | From the list, write down a prime number. | |
| | b | From the list, write down a multiple of 8. | (1) |
| | С | From the list, write down a factor of 36. | (1) |
| | d | From the list, write down an even number. | (1) |
| 11 | | Simplify $4p \times 3p^2 \times 2q$ | (1) |
| | | | (1) |

12 Simplify
$$\frac{8x \times 2x^2}{4x^3}$$

.....

(1)

13 Here is a quadrilateral ABCD and a line segment EF.

The line segment is the same length as the perpendicular height of the shape.



.....

e What is the area of this shape?

| 14 | $3\frac{2}{3} \times \frac{3}{4}$ | (3) |
|----|------------------------------------|-----|
| 15 | $1\frac{3}{5} \div \frac{3}{4}$ | (3) |
| | | (3) |
| 16 | $5\frac{7}{8} \times 2\frac{4}{5}$ | |
| | | (3) |
| 17 | $7\frac{4}{9} \div 2\frac{5}{8}$ | |

.....

| 18 | Calculate | 25% c | of 35. |
|----|-----------|-------|--------|
|----|-----------|-------|--------|

| 19 | Calculate 45% of 48. | (2) |
|----|--------------------------|-----|
| 20 | Calculate 51% of 38. | (2) |
| 21 | Calculate 16% of 95. | (2) |
| 22 | Write 37% as a fraction. | (2) |
| 23 | Write 8% as a fraction. | (1) |
| | | (1) |

| 25 | Write 96% as a fraction. | (1) |
|----|---------------------------|-----|
| 26 | Solve $3x + 7 = 37$ | (1) |
| 27 | Solve $5x - 12 = 33$ | (2) |
| 28 | Solve $9x - 8 = 46$ | (2) |
| 29 | Solve $\frac{2x}{3} = 12$ | (2) |

.....(2)

30 Solve
$$\frac{3x+7}{4} = 37$$

31 Find the solution to this equation when x = 7 and y = 12

$$3x - y + 35 =$$

.....

(2)

32 Find the solution to this equation when x = 3 and y = 2

$$\frac{5x+7y}{y} =$$

.....

(2)

33 Write 180 as a product of its prime factors.

| |
|------|

34 A shape is made from a semi-circle and an oblong.



a Find the area of the shape.

b Find the perimeter of the shape.

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(4)

(4)

35 Below is a ring.

The outer circle has a diameter of 40mm. The inner circle has a radius of 10mm.



Find the area of the shaded part of the circle. Give your answer correct to 2 decimal places.

36 Name the darker lines shown below.



(3)

(4)

37 Name the darker lines shown below.



(3)

38 Name the shaded parts on the circles below.



39 Factorise $x^2 + 6x + 8$

Factorise $x^2 + 6x + 8$ 40



(3)

Factorise $x^2 - 11x + 24$ 41

(3)

(2)

42 Factorise 8x + 32

.....

43 Two fair 6 sided dice are thrown.

The number that is thrown on each die is multiplied by the other to get the score.

a Draw the probability sample space described above.

b What is P(score < 8)

c What is the *P*(*Score is even*)

.....

.....

.....

(1)

(1)

(2)

d What is the *P*(*Score is prime*)

.....

44 Solve the inequality 3x + 2 < 20

45 Solve the inequality $\frac{6x-8}{5} \le 24$

.....

(2)

(2)

46 Solve the inequality $7x + 2 \le 9x - 8$

.....

(2)

47 Solve the inequality $\frac{5x-3}{2} > 2x + 7$

.....

.....

(3)

49 Solve by factorising $x^2 + 10x + 21 = 0$

.....

(3)

50 Write the error interval for x shown below.



51 Find the value of T if s=-4 and y=3



.....

| 53 | What is the value of Cos 60°? | (1) |
|----|-------------------------------|-----|
| 54 | What is the value of Cos 45°? | (1) |
| 55 | What is the value of Sin 45°? | (1) |
| 56 | What is the value of 17^0 ? | (1) |
| 57 | What is the value of x^0 ? | (1) |
| 58 | What is the value of 17^1 ? | (1) |
| | | |

59 Name the shaded parts on the circles below.



60 Name the darker lines shown below.



(3)

61 Two groups of children took a maths test.

| Group A | 20 | 22 | 13 | 13 | 16 | 15 | 6 | 16 | 16 |
|---------|----|----|----|----|----|----|---|----|----|
| Group B | 20 | 21 | 20 | 13 | 15 | 16 | 8 | 7 | 5 |

a Look at group A.

i. What is the modal average for group A?

.....

.....

(1)

ii What is the median for group A?

| Group A | 20 | 22 | 13 | 13 | 16 | 15 | 6 | 16 | 16 |
|---------|----|----|----|----|----|----|---|----|----|
| Group B | 20 | 21 | 20 | 13 | 15 | 16 | 8 | 7 | 5 |

b Look at group B.

i What is the maximum for group B?

(1) ii What is the range for group B?

c Look at all the data in the table.What is the mean average for all the data?

62 Calculate the area of the following shapes
 Show your working



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63 In a club, people were asked what their favourite colour was.

The responses are shown in the table below.

Draw a pie chart to represent this information.

| Favourite Colour | Frequency |
|------------------|-----------|
| Red | 12 |
| Blue | 15 |
| Green | 24 |
| Yellow | 18 |
| Pink | 9 |
| Purple | 2 |



64 On a street in a town, people were stopped and asked what their favourite football team is. The responses are shown in the table below.

Draw a pie chart to represent this information.

| Favourite Team | Frequency | | |
|----------------|-----------|--|--|
| Arsenal | 8 | | |
| Chelsea | 6 | | |
| Leeds United | 25 | | |
| Liverpool | 14 | | |
| Manchester Utd | 7 | | |
| Newcastle Utd | 30 | | |



65 A shop looked at the different types of products it was selling.

The information is shown in the table below.

Draw a pie chart to represent this information.

| Product | Frequency of sale | | | |
|--------------------|-------------------|--|--|--|
| Clothes | 19 | | | |
| Food | 35 | | | |
| Homeware | 3 | | | |
| Kitchen Appliances | 2 | | | |
| Toys | 13 | | | |

