Name:

# GCSE (1-9) <br> <br> Negative Numbers 

 <br> <br> Negative Numbers}

## Instructions

- Use black ink or ball-point pen.
- Answer all questions.
- Answer the questions in the spaces provided
- there may be more space than you need.
- Diagrams are NOT accurately drawn, unless otherwise indicated.
- You must show all your working out.


## Information

- 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

1 Work out 5-9

2 Work out -7+4

3 Work out $-8-10$

4 Work out $\quad-2+-11$

5 Work out $7--9$

6 Work out -5--12

7 Work out $-5+8$

8 Work out 16--4

9 Here are four numbers.

$$
-5
$$

$$
-4
$$

$$
4
$$

5
Write one of these numbers in each box to make a correct calculation.

$$
\square+\square=-9
$$

10 Here are four numbers.
$-7$
$-2$
2
7

Write one of these numbers in each box to make a correct calculation.

$$
\square+\square=-5
$$

11 Here are four numbers.
-8
$-2$
2
8

Write one of these numbers in each box to make a correct calculation.

$$
\square-\square=-10
$$

12 Here are four numbers.
-9
-3
3
9

Write one of these numbers in each box to make a correct calculation.

$$
\square-\square=12
$$

13 Work out $5 \times-4$

14 Work out $-7 \times 3$

15 Work out $-2 \times-6$

16 Work out $-4 \times 9$

17 Work out $-32 \div 4$

18 Work out $-25 \div 5$

19 Work out $-42 \div-7$

20 Work out $-2 \times 4 \times-9$

21

$$
4 \times \square=-12
$$

Write a number in the box to make a correct calculation.

22

$$
-10 \times \square=-20
$$

Write a number in the box to make a correct calculation.

23 $\square$
Write a number in the box to make a correct calculation.
(Total for Question 23 is 1 mark)

24


Write a number in the box to make a correct calculation.
(Total for Question 24 is 1 mark)

25


Write a number in the box to make a correct calculation.

26


Write a number in the box to make a correct calculation.

27 Here is a number sequence.

| 11 | 6 | 1 | $\square$ | $\square$ |
| :--- | :--- | :--- | :--- | :--- |

Fill in the missing boxes to continue the sequence.

28 Here is a number sequence.

| -20 | -12 | -4 | $\square$ |
| :--- | :--- | :--- | :--- |

Fill in the missing boxes to continue the sequence.

29 Here is a number sequence.

| -11 | $\square$ | $\square$ |
| :--- | :--- | :--- |

Fill in the missing boxes to complete the sequence.

30 Here is a number sequence.


Fill in the missing boxes to complete the sequence.

31 The temperature in Glasgow one day was $-4^{\circ} \mathrm{C}$
The next day the temperature was $3^{\circ} \mathrm{C}$ lower.
Work out the new temperature.
$\qquad$

32 The temperature in London at midnight was $-3^{\circ} \mathrm{C}$
By 11 am , the temperature had risen by $5^{\circ} \mathrm{C}$.
Work out the temperature at 11 am .
$\qquad$

33 The temperature in Leeming at midnight was $-2^{\circ} \mathrm{C}$
The temperature in Leeming at midday was $8^{\circ} \mathrm{C}$
Work out the difference between the temperature in Leeming at midnight and midday.
$\qquad$

34 The table shows the temperature in four cities on a day in January.

| City | Temperature |
| :---: | :---: |
| London | $3{ }^{\circ} \mathrm{C}$ |
| New York | $-2^{\circ} \mathrm{C}$ |
| Tokyo | $5^{\circ} \mathrm{C}$ |
| Oslo | $-4^{\circ} \mathrm{C}$ |

(a) Write down the name of the city with the lowest temperature.
(b) Work out the difference between the temperature in New York and the temperature in Tokyo.
$\qquad$
The next day the temperature in New York increased by $3^{\circ} \mathrm{C}$.
(c) Work out the new temperature in New York.

35 The table shows the temperature at midnight and midday on January $2^{\text {nd }} 2020$ in four cities.

| City | Midnight <br> Temperature | Midday <br> Temperature |
| :---: | :---: | :---: |
| Murmansk | $-9^{\circ} \mathrm{C}$ | $-6^{\circ} \mathrm{C}$ |
| Budapest | $-3^{\circ} \mathrm{C}$ | $4^{\circ} \mathrm{C}$ |
| Paris | $4^{\circ} \mathrm{C}$ | $8^{\circ} \mathrm{C}$ |
| Prague | $-4{ }^{\circ} \mathrm{C}$ | $1^{\circ} \mathrm{C}$ |

(a) Write down the name of the city with the lowest midnight temperature.
$\qquad$
(b) Which city had the greatest rise in temperature from midnight to midday?
(c) At midnight, how many degrees colder was Murmansk than Paris?

36 The table shows the temperature at midnight on 1 December 2019 in cities.

| City | Temperature |
| :---: | :---: |
| Helsinki | $-6^{\circ} \mathrm{C}$ |
| Berlin | $3{ }^{\circ} \mathrm{C}$ |
| Utrecht | $-2^{\circ} \mathrm{C}$ |
| Rome | $7^{\circ} \mathrm{C}$ |

(a) Write down the name of the city with the lowest temperature.
(b) Work out the difference between the temperature in Utrecht and Rome.
$\qquad$

