

Name: _____

GCSE (1 – 9)

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 $5 - 9$

-4

(Total for Question 1 is 1 mark)

2 Work out $-7 + 4$

-3

(Total for Question 2 is 1 mark)

3 Work out $-8 - 10$

-18

(Total for Question 3 is 1 mark)

4 Work out $-2 + -11$

-13

(Total for Question 4 is 1 mark)

5 Work out $7 - -9$

16

(Total for Question 5 is 1 mark)

6 Work out $-5 - -12$

7

(Total for Question 6 is 1 mark)

7 Work out $-5 + 8$

3

(Total for Question 7 is 1 mark)

8 Work out $16 - -4$

20

(Total for Question 8 is 1 mark)

9 Here are four numbers.

-5 -4 4 5

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

$$\begin{array}{l} \boxed{-5} + \boxed{-4} = -9 \\ \text{OR} \quad \boxed{-4} + \boxed{-5} \end{array}$$

(Total for Question 9 is 1 mark)

10 Here are four numbers.

-7 -2 2 7

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

$$\begin{array}{l} \boxed{2} + \boxed{-7} = -5 \\ \text{OR} \quad \boxed{-7} + \boxed{2} \end{array}$$

(Total for Question 10 is 1 mark)

11 Here are four numbers.

-8 -2 2 8

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

$$\begin{array}{l} \boxed{-8} - \boxed{2} = -10 \\ \text{OR} \quad \boxed{-2} - \boxed{8} \end{array}$$

(Total for Question 11 is 1 mark)

12 Here are four numbers.

-9 -3 3 9

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

$$\begin{array}{l} \boxed{9} - \boxed{-3} = 12 \\ \text{OR} \quad \begin{array}{r} 3 \\ \underline{3} \\ 3 \end{array} - \boxed{-9} \end{array}$$

(Total for Question 12 is 1 mark)

13 Work out 5×-4

-20

(Total for Question 13 is 1 mark)

14 Work out -7×3

-21

(Total for Question 14 is 1 mark)

15 Work out -2×-6

12

(Total for Question 15 is 1 mark)

16 Work out -4×9

-36

(Total for Question 16 is 1 mark)

17 Work out $-32 \div 4$

-8

(Total for Question 17 is 1 mark)

18 Work out $-25 \div 5$

-5

(Total for Question 18 is 1 mark)

19 Work out $-42 \div -7$

6

(Total for Question 19 is 1 mark)

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

-8×-9

72

(Total for Question 20 is 1 mark)

21

$$\boxed{4} \times \boxed{-3} = \boxed{-12}$$

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

(Total for Question 21 is 1 mark)

22

$$\boxed{-10} \times \boxed{2} = \boxed{-20}$$

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

(Total for Question 22 is 1 mark)

23

$$\boxed{-6} \times \boxed{-4} = \boxed{24}$$

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

(Total for Question 23 is 1 mark)

24

$$\boxed{-2} \times \boxed{8} = \boxed{-16}$$

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

(Total for Question 24 is 1 mark)

25

$$\boxed{-18} \div \boxed{-2} = \boxed{9}$$

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

(Total for Question 25 is 1 mark)

26

$$\boxed{27} \div \boxed{-3} = \boxed{-9}$$

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

(Total for Question 26 is 1 mark)

27 Here is a number sequence.

11	6	1	-4	-9
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Fill in the missing boxes to continue the sequence.

(Total for Question 27 is 2 marks)

28 Here is a number sequence.

-20	-12	-4	4	12
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Fill in the missing boxes to continue the sequence.

(Total for Question 28 is 2 marks)

29 Here is a number sequence.

-11	-7	-3	1	5
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Fill in the missing boxes to complete the sequence.

(Total for Question 29 is 2 marks)

30 Here is a number sequence.

25	10	-5	-20	-35
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Fill in the missing boxes to complete the sequence.

(Total for Question 30 is 2 marks)

- 31 The temperature in Glasgow one day was -4°C
The next day the temperature was 3°C lower.

Work out the new temperature.

 -7 $^{\circ}\text{C}$

(Total for Question 31 is 1 mark)

- 32 The temperature in London at midnight was -3°C
By 11 am, the temperature had risen by 5°C .

Work out the temperature at 11 am.

 2 $^{\circ}\text{C}$

(Total for Question 32 is 1 mark)

- 33 The temperature in Leeming at midnight was -2°C
The temperature in Leeming at midday was 8°C

Work out the difference between the temperature in Leeming at midnight and midday.

 10 $^{\circ}\text{C}$

(Total for Question 33 is 1 mark)

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

City	Temperature
London	3°C
New York	-2°C
Tokyo	5°C
Oslo	-4°C

- (a) Write down the name of the city with the lowest temperature.

 Oslo

(1)

- (b) Work out the difference between the temperature in New York and the temperature in Tokyo.

 7 $^{\circ}\text{C}$

(1)

The next day the temperature in New York increased by 3°C .

- (c) Work out the new temperature in New York.

 1 $^{\circ}\text{C}$

(1)

(Total for Question 34 is 3 marks)

- 35 The table shows the temperature at midnight and midday on January 2nd 2020 in four cities.

City	Midnight Temperature	Midday Temperature
Murmansk	-9 °C	-6 °C
Budapest	-3 °C	4 °C
Paris	4 °C	8 °C
Prague	-4 °C	1 °C

- (a) Write down the name of the city with the lowest midnight temperature.

Murmansk
(1)

- (b) Which city had the greatest rise in temperature from midnight to midday?

Budapest
(1)

- (c) At midnight, how many degrees colder was Murmansk than Paris?

13 °C
(1)

(Total for Question 35 is 3 marks)

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

City	Temperature
Helsinki	-6 °C
Berlin	3 °C
Utrecht	-2 °C
Rome	7 °C

- (a) Write down the name of the city with the lowest temperature.

Helsinki
(1)

- (b) Work out the difference between the temperature in Utrecht and Rome.

9 °C
(1)

(Total for Question 36 is 2 marks)