Worksheet (1) |

1ˢᵗ Semester | 2023-2024

Subject: Math

Chapter: 1 (numbers and calculations)

Name: <u>Answer key</u>

Grade 6 CS

Objectives:

• **To apply the rule of adding, subtracting, multiplying, and dividing negative numbers**

Negative numbers.

Adding and subtracting negative numbers.

Remember:

In **adding** and **subtracting** negative numbers, remember that:

• **Same** signs $\longrightarrow$ **add** the numbers and put the **common** sign.

  Example: -2 + -4 = -6

• **Different** signs $\longrightarrow$ **subtract** the numbers and the **sign** of the **answer** is according to the **sign** of the **bigger** number.

  Example: -8 + 5 = -3

• When you have **two negative** signs (- -) $\longrightarrow$ **turn** the sign to **positive** (+).

  Example: (4 − − 6 it will be 4 + 6 = 10)

Exercise (1):

Work out.

a) -6 + 8 = **2**

b) -25 - 5 = -30

c) -8 + (-9) = -17

d) -15 − − 15 = 0

e) -10 + 2 = -8

f) -56 + (-7) = -63

g) -3 + (-9) = -12

h) -11- 5 = -16

i) 17 − 30 = -13

Accredited by   معتمدة من

Cambridge Assessment International Education
Cambridge International School

edexcel

CIS COUNCIL OF INTERNATIONAL SCHOOLS

Eco-Schools

j) -12 – – 3 = -9   k) -6 – – 3 = -3   l) 9 – 12 = -3

m) 13 – – 28 = 41   n) -7 – 10 = -17   o) -20 + 30 = 10

Multiplying and dividing negative numbers.

Remember:

- if you have **same** signs (+ +) or (- -) ⟶ The sign of the **answer** is **positive** (+)

  Example: - 2 × - 5 = 10

- If you have **different** signs (+ -) ⟶ The sign of the **answer** is **negative** (-)

  Example: -3 × 9 = -27

Exercise (2):

Work out.

a) -8 x 7 = -56   b) -6 x (-2) = 12   c) 4 x (-3) = -12

d) 14 x (-7) = -98   e) -8 x (-3) = 24   f) -60 x 8 = -480

g) -10 x (-20) = 200   h) 13 x 4 = 52   i) -8 ÷ 2 = -4

j) 12÷ (-6) = -2   k) -10 ÷ 5 = -2   l) 20 ÷ (-4) = -5

m) -50 ÷ 5 = -10   n) -27 ÷ (-9) = 3   o) -120 ÷ 20 = -6

Mixed questions.

Exercise (3):

Work out.

a) -10 + -9 = -19	b) 7 – – 4 = 11
c) -13 + 6 = -7	d) 10 x (-6) = -60
e) -9 ÷ (-3) = 3	f) -35 ÷ 7 = -5
g) 19 – 9 = 10	h) -14 – 8 = -22
i) 42 ÷ (-6) = -7	j) -12 x (-4) = 48
k) 26 + (-8) = 18	l) 7 + (-30) = -23
m) –14 – – 13 = -1	n) -36 – 4 = -40
o) -5 x (-10) = 50	p) 9 x (-6) = -54
q) -48 ÷ 8 = -6	r) 21÷ (-3) = -7

Word problems.

Problem (1):

The highest place in the world where you could sit is on top of Mount Everest. It is 8840 m high.

The lowest place where you could sit is on the shore of the Dead Sea. It is -393 m high.

What is the **difference** between these heights?

8840 + 393 = 9233 m

Problem (2):

At a weather station in the Arctic the temperature was recorded at –23 °C.

Two hours later it had fallen by 8 °C.

    a) What was the new temperature?

$$-23 - 8 = -31$$

    b) Four hours after the first readings the temperature was –41 °C. By how much had the temperature fallen in 4 hours?

18°C