

Worksheet (1) |

The Lower Secondary
Stage (6-8)

1st Semester | 2023-2024

Subject: Math

Name: _____

Objectives:

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

Chapter: 1 (numbers and calculations)

Grade 6 CS

Negative numbers.

Adding and subtracting negative numbers.

Remember:

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

- **Same** signs \Rightarrow **add** the numbers and put the **common** sign.
Example: $-2 + -4 = -6$
- **Different** signs \Rightarrow **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 ($- -$) \Rightarrow **turn** the sign to **positive** (+).
Example: $(4 - - 6$ it will be $4 + 6 = 10)$

Exercise (1):

Work out.

a) $-6 + 8 =$

b) $-25 - 5 =$

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

d) $-15 - - 15 =$

e) $-10 + 2 =$

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

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

h) $-11 - 5 =$

i) $17 - 30 =$

$$j) -12 - - 3 =$$

$$k) -6 - - 3 =$$

$$l) 9 - 12 =$$


$$m) 13 - - 28 =$$

$$n) -7 - 10 =$$

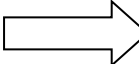
$$o) -20 + 30 =$$

Multiplying and dividing negative numbers.

Remember:

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

Example: $-2 \times -5 = 10$

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

Example: $-3 \times 9 = -27$

Exercise (2):

Work out.

$$a) -8 \times 7 =$$

$$b) -6 \times (-2) =$$

$$c) 4 \times (-3) =$$

$$d) 14 \times (-7) =$$

$$e) -8 \times (-3) =$$

$$f) -60 \times 8 =$$

$$g) -10 \times (-20) =$$

$$h) 13 \times 4 =$$

$$i) -8 \div 2 =$$

$$j) 12 \div (-6) =$$

$$k) -10 \div 5 =$$

$$l) 20 \div (-4) =$$

$$m) -50 \div 5 =$$

$$n) -27 \div (-9) =$$

$$o) -120 \div 20 =$$

Mixed questions.

Exercise (3):

Work out.

a) $-10 + -9 =$	b) $7 - - 4 =$
c) $-13 + 6 =$	d) $10 \times (-6) =$
e) $-9 \div (-3) =$	f) $-35 \div 7 =$
g) $19 - 9 =$	h) $-14 - 8 =$
i) $42 \div (-6) =$	j) $-12 \times (-4) =$
k) $26 + (-8) =$	l) $7 + (-30) =$
m) $-14 - - 13 =$	n) $-36 - 4 =$
o) $-5 \times (-10) =$	p) $9 \times (-6) =$
q) $-48 \div 8 =$	r) $21 \div (-3) =$

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?

Problem (2):

At a weather station in the Arctic the temperature was recorded at $-23\text{ }^{\circ}\text{C}$.

Two hours later it had fallen by $8\text{ }^{\circ}\text{C}$.

- a) What was the new temperature?

- b) Four hours after the first readings the temperature was $-41\text{ }^{\circ}\text{C}$. By how much had the temperature fallen in 4 hours?

