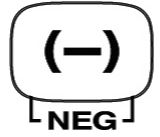


# SHARP

## Worksheet 2: Integers Grade 8 Mathematics CAPS



Remember the button on your SHARP EL535 helps make your negative integers.

1. What are integers?

2. Fill in  $<$ ,  $>$  or  $=$

a)  $-23$  \_\_\_\_  $-24$

b)  $-1$  \_\_\_\_  $0$

c)  $3$  \_\_\_\_  $-3$

d)  $-(-7)$  \_\_\_\_  $+(-7)$

e)  $-(-3)$  \_\_\_\_  $+(-3)$

f)  $-2.5$  \_\_\_\_  $-2\frac{1}{2}$

g)  $-10$  \_\_\_\_  $- (+10)$

h)  $(-2)^2$  \_\_\_\_  $-4$

i)  $-1$  \_\_\_\_  $(-1)^3$

j)  $(-3)(-4)$  \_\_\_\_  $(-2)(+6)$

k)  $(-3)^2$  \_\_\_\_  $-(-3)^2$

l)  $-4$  \_\_\_\_  $1$

3. Count backwards for 10 numbers in

a) 3's from 10

b) 4's from 16

c) 2's from 8

d) 7's from 14

e) 6's from 6

f) 9's from 36

4. Complete the statements for each of these rules:

a)  $(-) \times (+) = ?$

b)  $(+) \times (?) = (+)$

c)  $(?) \times (-) = (+)$

d)  $(-) \div (-) = ?$

e)  $(-) \times (?) = (-)$

f)  $(+) \div (-) = ?$

g)  $(+) \div (+) = ?$

h)  $(?) \div (+) = (-)$

i)  $(-)^3 = ?$

j)  $(+)^3 = ?$

k)  $(-)^2 = ?$

l)  $(+)^2 = ?$

5. Find the answers for each of these without using your calculator (Don't forget to use BEDMAS):

a)  $6 - (-3) + \sqrt{25}$

b)  $-25 + (-2)^3$

c)  $5 - (-5) - (2)^3$

d)  $-10 + \sqrt{16} - 3 - (-12)$

e)  $3 - 4^3 + (-6) + \sqrt{121}$

f)  $25 - \sqrt{-8} - 8 + (-5)$

g)  $78 + 5(-3) + (-15)(2)$

h)  $-6(-2) + \frac{-12}{-2}$

i)  $\sqrt{25} + \sqrt[3]{-125} + (-1)(-2)$

j)  $\frac{-5(3)+6}{7+(-4)}$

k)  $\sqrt[3]{8} - (-4)(3) + (-4)^2$

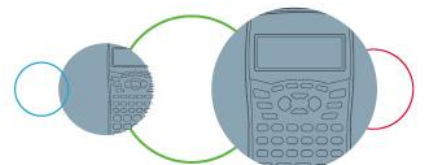
l)  $\sqrt[3]{-64} \times (-4) + \frac{16}{-2}$

m)  $-\frac{10}{2} + \frac{24}{-3} - (4)(-3)$

n)  $\sqrt{\frac{121}{144}} + \frac{10+(-9)}{-2(-6)}$

o)  $-4 + \frac{(-5)}{-1} - (-6)^2$

p)  $-1 + \frac{25}{-5} + (-4)(-1)(3)$



q)  $8 + \sqrt{125} - (-3)^3$

r)  $14 - \frac{\sqrt{49}}{3-(-4)} + \sqrt[3]{27}$

s)  $-\frac{9}{-3} \times (-2)(3) + 1$

t)  $-8 - (-4) + (2)^3$

6. Determine the difference between the minimum and maximum temperatures for each of these cities:

a) Cape Town → Min: 18° Max: 27°

b) New York → Min: 1° Max: 12°

c) Vancouver → Min: -1° Max: 6°

d) Moscow → Min: -5° Max: -1°

e) Beijing → Min: -2° Max: 7°

f) London → Min: 4° Max: 10°

g) Seoul → Min: -3° Max: 7°

h) Male → Min: 28° Max: 32°

i) Dhaka → Min: 14° Max: 30°

j) Toronto → Min: -4° Max: 2°

7. Based on your answers and the information in question 6, answer the following questions:

a) Which city has the lowest minimum?

b) Which city has the highest minimum?

c) Which city has the lowest maximum?

d) Which city has the highest maximum?

e) Which city has the biggest change or difference in temperature?

f) Which city has the smallest change or difference in temperature?

8. Sue makes the following transactions on her bank account which originally has R656 in it.

First Sue withdraws R500, then she deposits R200 the following week. Sue then goes shopping and she buys clothes for R400.

a) How much money does Sue now have in the bank?

b) How much should Sue deposit into her bank account so that her balance is at a 0?

c) Sue's grandfather sends Sue R350. How much does Sue now have in her bank account?

d) If Sue decides to make sure she has R50 left in her bank account, how much money can she still spend?

