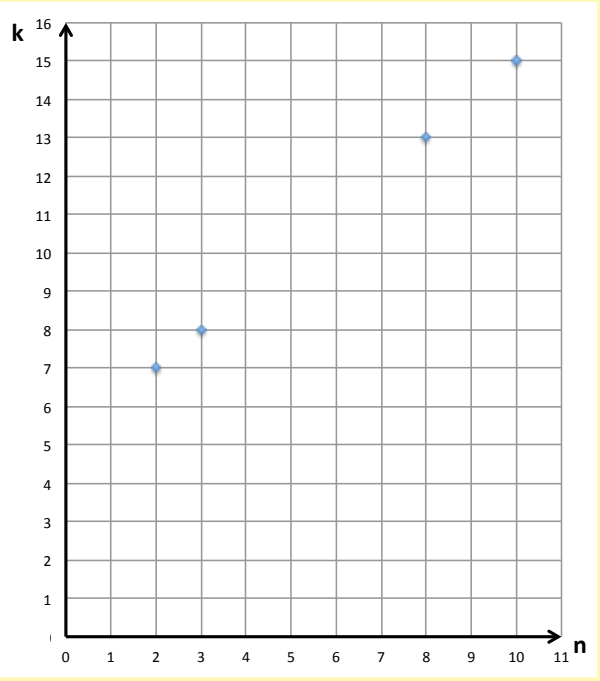
Worksheet 6

"The archaeologist Giancarlo"

Martjin's classmates have drawn other incisions, constructing them referring to a different relation between the number of tips on the heads of the incisions and their heights. This is the graph they have constructed:

1) **What is the relation between the numbers of tips and the heights of the incisions drawn by Martjin's classmates?**

2) **Represent the relation also through a symbolic expression to be sent to Martjin's classmates to show them what you have observed.**



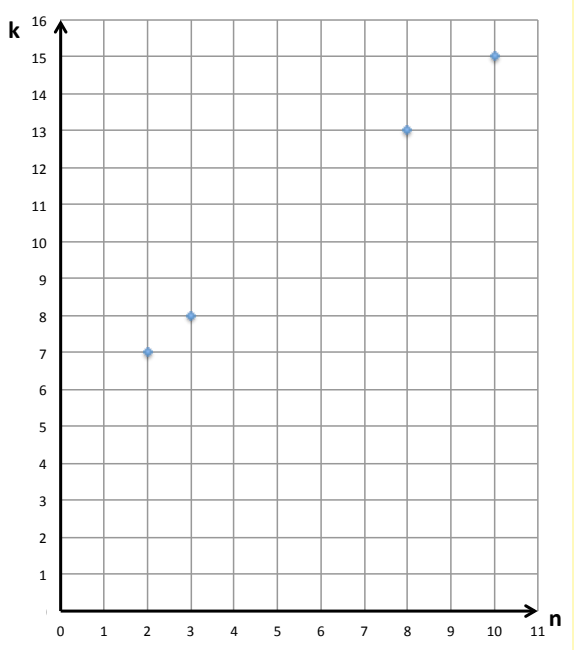
Worksheet 6A – Helping worksheet

"The archaeologist Giancarlo"

Martjin's classmates have drawn other incisions, constructing them referring to a different relation between the number of tips on the heads of the incisions and their heights. This is the graph they have constructed:

1) **What is the relation between the numbers of tips and the heights of the incisions drawn by Martjin's classmates?**

2) **Represent the relation also through a symbolic expression to be sent to Martjin's classmates to show them what you have observed.**



HELP:

Try to understand what kind of information is provided by the first point within the graph: What does 2 mean? What does 7 mean?

Find the information provided by the other points within the graph.

Use these information to identify a general rule that characterise the relation between the numbers of tips and the heights of the incisions.

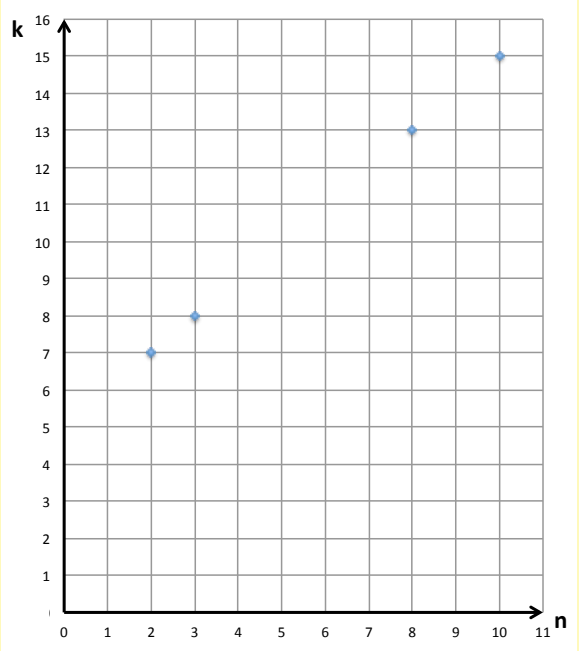
Worksheet 6B – Helping worksheet

"The archaeologist Giancarlo"

Martjin's classmates have drawn other incisions, constructing them referring to a different relation between the number of tips on the heads of the incisions and their heights. This is the graph they have constructed:

1) **What is the relation between the numbers of tips and the heights of the incisions drawn by Martjin's classmates?**

2) **Represent the relation also through a symbolic expression to be sent to Martjin's classmates to show them what you have observed.**



HELP:

Let's use the following table to collect all these information (complete it!):

n=2 k=7

n=3 k=

n= k=

n= k=

What is the relation between the number of tips on the head of one incision (n) and the height of the same incision (k)?

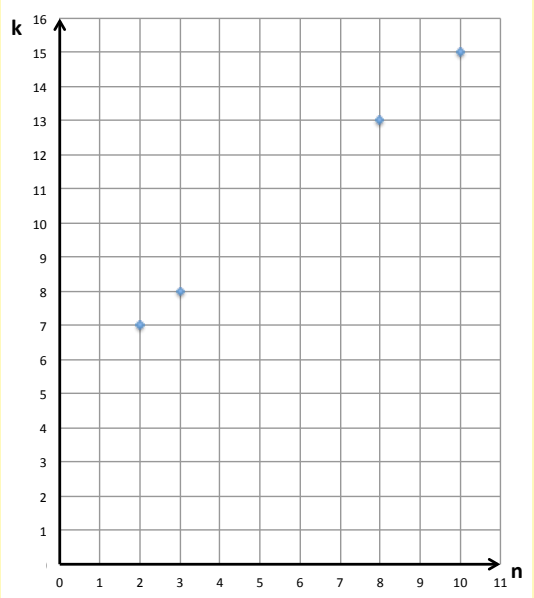
Worksheet 6C – Helping worksheet

"The archaeologist Giancarlo"

Martjin's classmates have drawn other incisions, constructing them referring to a different relation between the number of tips on the heads of the incisions and their heights. This is the graph they have constructed:

1) **What is the relation between the numbers of tips and the heights of the incisions drawn by Martjin's classmates?**

2) **Represent the relation also through a symbolic expression to be sent to Martjin's classmates to show them what you have observed.**



HELP:

We have collected the information provided by the graph, writing the values of k in order to highlight the relation between n and k.
Complete the following table:

n	k
2	7=5+2
3	8=5+3
8	13=5+…
10	15=…

What is the relation between the number of tips on the head of one incision (n) and the height of the same incision (k)?

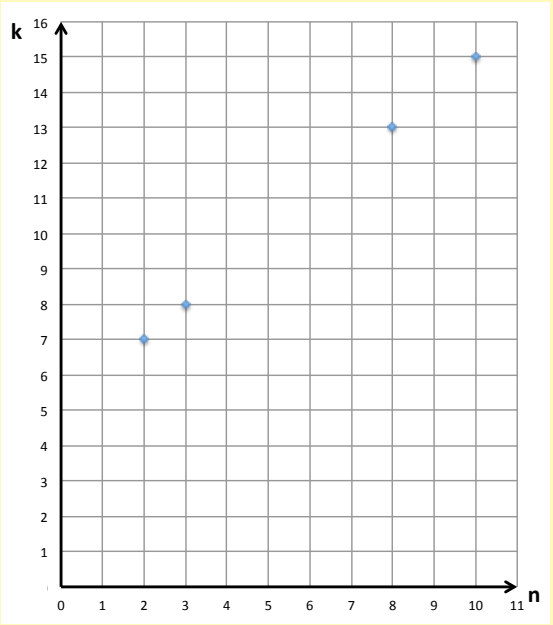
Worksheet 6D

"The archaeologist Giancarlo"

Martjin's classmates have drawn other incisions, constructing them referring to a different relation between the number of tips on the heads of the incisions and their heights. This is the graph they have constructed:

1) **What is the relation between the numbers of tips and the heights of the incisions drawn by Martjin's classmates?**

2) **Represent the relation also through a symbolic expression to be sent to Martjin's classmates to show them what you have observed.**



If I consider the height and I subtract 5 from it, I always find the number of tips.

I think that k could be always found if we consider n and then add 5 to it.

Two students from another class gave these answers. What do you think about these observations? Are they correct? Why?

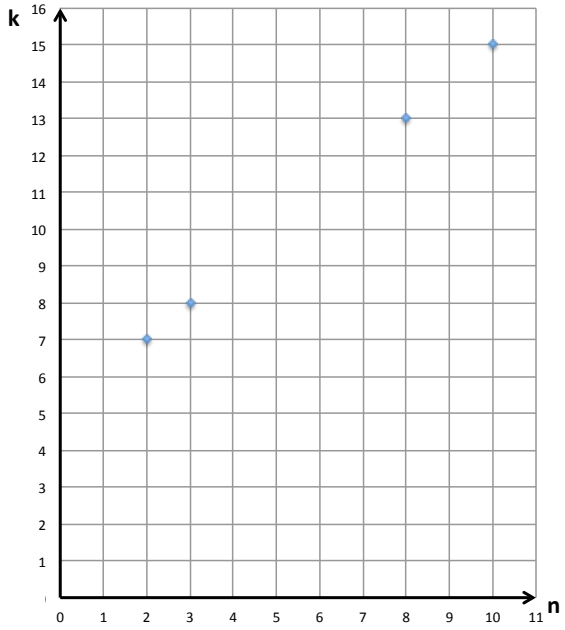
Worksheet 6E

"The archaeologist Giancarlo"

Martjin's classmates have drawn other incisions, constructing them referring to a different relation between the number of tips on the heads of the incisions and their heights. This is the graph they have constructed:

1) **What is the relation between the numbers of tips and the heights of the incisions drawn by Martjin's classmates?**

2) **Represent the relation also through a symbolic expression to be sent to Martjin's classmates to show them what you have observed.**



If I consider the height and I subtract 5 from it, I always find the number of tips.

I think that k could be always found if we consider n and then add 5 to it.

We agreed that both the relations introduced within these answers are correct. How could we represent these relations through symbolic expressions that Martjin can understand?