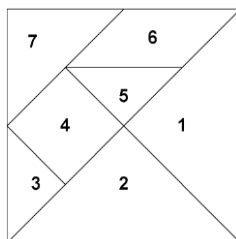


Mathematics III: regularity and repetition

Notas de enseñanza

Temas 1-2

It's recommended that the teacher brings printed material (copies) to the classroom so that the students can solve the activities. By applying this activity in the first class, it's probable that the students forget the scissors, so it may be convenient for the teacher to carry at least a pair of them. It's also recommendable to have the correct answers for each question and action proposed before the activity to solve possible doubts from the students. The solution is shared at the game, so that it can help the teacher solve possible doubts.



If you don't have this material for any reason, you just have to project the figures to the students and let them develop the activity.

La videolección *MIT BLOSSOMS* se llevará a cabo durante la clase donde se deberán realizar diversas pausas para que los alumnos puedan avanzar en las actividades que corresponden a cada sección.

- En el caso de la presente actividad puede conocer más sobre el *MIT BLOSSOMS* desde: <https://blossoms.mit.edu/about>
- Acceso a videolección Actividad 1 (temas 1 y 2): http://blossoms.mit.edu/videos/files/spanish_subtitles/how_estimate_value_pi_spanish_subtitles_flash
- Descargar la guía de la videolección desde: http://blossoms.mit.edu/sites/default/files/video/guide/Value-of-Pi-Teacher-guide-English_1.pdf
- Se recomienda que el profesor vea solamente para su clase del minuto 00:00 a 10:30 correspondiente a la videolección.

Tema 3-5

The teacher must ask one or two questions to start. For example: What are trigonometric functions? What is a Cartesian plane and what does it have to do with trigonometric functions? What applications do trigonometric functions have in everyday life? For the students to become interested in the topic, it will be convenient to give some minutes (no more than 5) to exchange comments about the learning of the activity.

Tema 6-7

Before the beginning of the activity the teacher should evaluate the student's knowledge about trigonometric functions. Teams should not have more than 2 people, it is also recommended to have different extra exercises.

Tema 8-10

Before starting the activity, the teacher should evaluate the students' knowledge of the topic, and at the same time, he should give examples of real situations. Teams can't be of more than 2 people; as a suggestion you should have two or three scientific calculators, a digital camera or a Smartphone, thread or bricklayer cord. Additionally, it is recommended to have different extra exercises.

La videolección *MIT BLOSSOMS* se realizará durante la clase donde se deberán de realizar diversas pausas para que los alumnos puedan avanzar en las actividades que corresponden a cada sección.

- En el caso de la presente actividad puede conocer más sobre el *MIT BLOSSOMS* desde: <https://blossoms.mit.edu/about>
- Acceso a videolección Actividad 4(temas 8, 9 y 10):
https://blossoms.mit.edu/videos/files/videos/pythagorean_theorem_geometry%E2%80%99s_most_elegant_theorem_english_flash
- Descargar la guía de la videolección desde:
<https://blossoms.mit.edu/sites/default/files/video/guide/Haupt-Teacher-Guide.pdf>
- Se recomienda que el profesor vea solamente para su clase del minuto 00:00 a 12:32 correspondiente a la videolección.

Tema 11-12

Before the start of the activity, the teacher should evoke the knowledge of the students on statistics topics. It will be desirable for the teacher to be familiar with the calculation of measures of central tendency, using Excel (or similar).

Tema 13-15

It is convenient for the teacher to be familiar with the calculation of statistic data through the use of the different technological resources available.