



Math Kangaroo in USA

since 1998

International Competition in Mathematics

A FUN MATH COMPETITION FOR STUDENTS IN GRADES 1-12

Thursday, March 21, 2019

5:30-7:30 PM

at California State University, Fresno

Free preparation sessions for Math Kangaroo are offered by Fresno State faculty and students on Saturdays 2/2/19, 3/2/19, and 3/16/19.

Learn more and register at <http://www.fresnomathcircle.org/competitions.html>.

**Registration deadline: December 15, 2018
or when center capacity is reached**

Sample problems

Grades 1-2: Today it is March 18, 2010, and I am 7 years old. How old will I be on March 18, 2020?
A) 17 years old B) 16 years old C) 13 years old D) 12 years old

Grades 3-4: Matthew and Clara live in a skyscraper. Clara lives 12 floors above Matthew. One day Matthew went to visit Clara, and he took the stairs up from his apartment to Clara's apartment. Half-way up he was on the 8th floor. On what floor does Clara live?
A) 12 B) 14 C) 16 D) 20 E) 24

Grades 5-6: Adam divided a certain secret number by 7. Then, he added 7 to the result and multiplied the number he obtained in this way by 7. For the final result he got the number 777. What was Adam's secret number?
A) 770 B) 111 C) 722 D) 567 E) 728

Grades 7-8: The smallest two-digit number that is not the sum of three different one-digit numbers is
A) 10 B) 15 C) 23 D) 25 E) 28

Grades 9-10: Two of the altitudes of a triangle are 10 cm and 11 cm. Which of the following cannot be the length of the third altitude?
A) 5 cm B) 6 cm C) 7 cm D) 10 cm E) 100 cm

Grades 11-12: Two right cylinders *A* and *B* have the same volume. The radius of the base of *B* is 10% larger than that of *A*. How much larger is the height of *A* than that of *B*?
A) 5% B) 10% C) 11% D) 20% E) 21%

See more sample problems at <http://www.mathkangaroo.org>.

Questions? E-mail Dr. Maria Nogin at mnogin@csufresno.edu.