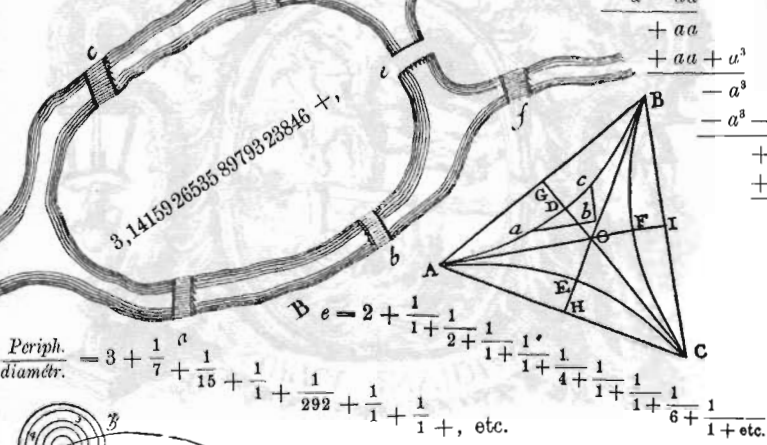
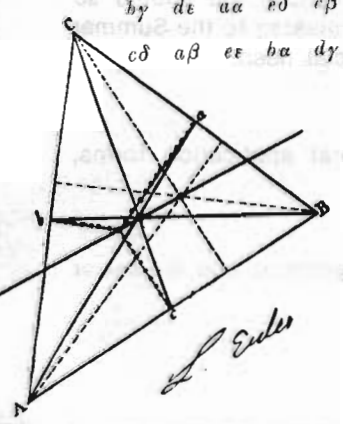
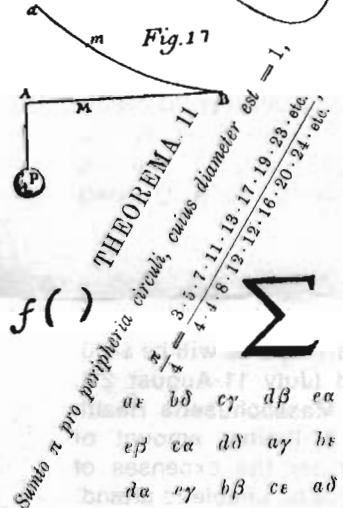
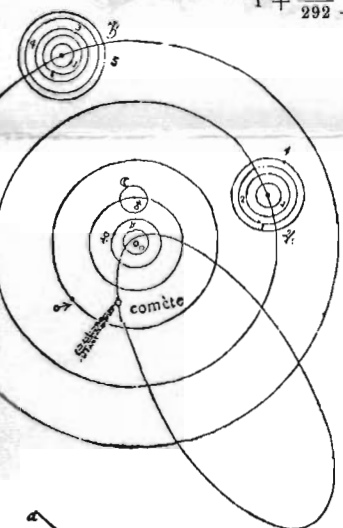


$$\sqrt{3} = 1 + \frac{1}{1} + \frac{1}{2} + \frac{1}{1} + \frac{1}{2} + \frac{1}{1} + \frac{1}{2} + \text{etc.}$$



Periph. diamtr. = $3 + \frac{1}{7} + \frac{1}{15} + \frac{1}{1} + \frac{1}{292} + \frac{1}{1} + \frac{1}{1} + \text{etc.}$

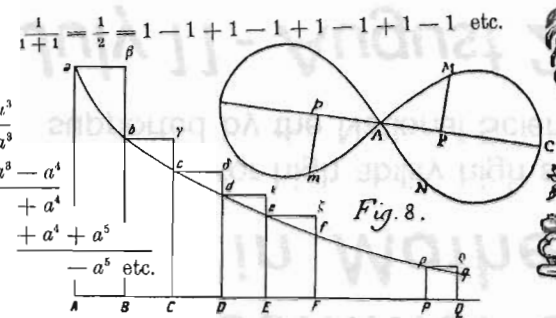


$$1 + a) \quad 1 \quad (1 - a + aa - a^3 + a^4) \quad \frac{\pi\pi}{6} = 1 + \frac{1}{4} + \frac{1}{9} + \frac{1}{16} + \frac{1}{25} + \frac{1}{36} + \frac{1}{49} + \text{etc.}$$

$$\frac{1}{1+a} = \frac{1}{2} = 1 - 1 + 1 - 1 + 1 - 1 + 1 - 1 \text{ etc.}$$

$$\frac{1}{1+a} = \frac{1}{\beta}$$

$$1 + a^2 + a^4 + a^6 + a^8 + a^{10} + a^{12} + a^{14} + a^{16} + a^{18} + a^{20} + a^{22} + a^{24} + a^{26} + a^{28} + a^{30} + a^{32} + a^{34} + a^{36} + a^{38} + a^{40} + a^{42} + a^{44} + a^{46} + a^{48} + a^{50} + a^{52} + a^{54} + a^{56} + a^{58} + a^{60} + a^{62} + a^{64} + a^{66} + a^{68} + a^{70} + a^{72} + a^{74} + a^{76} + a^{78} + a^{80} + a^{82} + a^{84} + a^{86} + a^{88} + a^{90} + a^{92} + a^{94} + a^{96} + a^{98} + a^{100} + \text{etc.}$$



Hampshire College Summer Studies in Mathematics

July 11 - August 21, 1976

for high ability high school students
supported by the National Science Foundation

Fifty-five exceptionally motivated and talented secondary school students and a dozen mathematician/teachers will be invited to the Hampshire College campus for a stimulating six week encounter with mathematics in an intense, demanding, and rewarding atmosphere. Working in small classes and individually, participants will actively engage in the processes of mathematical thought: investigating concrete problems, seeking patterns and generalizations, formulating conjectures in the language of mathematics, and applying insight and experience to the creation of proofs. The entire faculty will live on campus and will join with students for meals and recreational activities.

The daily schedule (Monday-Saturday) includes four hours of classes each morning and several hours of independent and small group study. At the start of the summer we will have four workshops, each one led by a college or university mathematician assisted by talented graduated and undergraduate math students. Each workshop will investigate many significant problems from outside the usual secondary school or early college curricula—from rings and randomization to topology and tessellations—but emphasis will be on the methods of discovery and communication rather than on the accumulation of results. Midway through the program participants will choose the direction of their mathematical activities for the remainder of the summer. Classes, seminars, filmmaking, and individual projects have occupied past Summer Studies participants with topics such as combinatorics, symmetry, mathematical logic, map coloring, Lobachevskian geometry, limits, and number theory.

Participants in the Summer Studies will have use of the classrooms, library, lounges, game and puzzle room, and athletic facilities of the Hampshire College campus. Computer facilities will include teletype and graphics terminals connected to the University of Massachusetts KRONOS 2.1 timesharing system and access to other area installations. Programs of films and special lectures by visiting mathematicians are planned.

Each year since 1971 Hampshire College, with the support of the National Science Foundation, has hosted the Summer Studies. We expect the 550 acre campus of former farmland and woods at the foot of the Holyoke range to again provide a pleasant setting for the creation, sharing, and enjoyment of mathematics.

The illustrations are from the Opera Omnia of the prolific Swiss mathematician Leonhard Euler [1707-1783].

Please share this announcement.

In the operation of the project and in selecting individuals for participation in, and for administration of, the project, Hampshire College will not discriminate against any person on the grounds of race, creed, color, sex, or national origin.

tests's return.

and the acceptance decision will be made soon after the school sponsor who will administer our three-hour interesting Test. The test will be mailed directly to the sponsor. A completed application form includes the signature of a

your application. scores, or any information which might help us evaluate Studies. Feel free to send transcripts, PSAT, SAT, or MAA enjoy the intensive involvement demanded by the Summer particularly stimulated you and why you believe you would specifically mathematical ideas or problems which have like to participate in the Summer Studies. Describe informative letter to the director, explaining why you would Along with the application form, please send a friendly and

David C. Kelly, Director
Summer Studies in Mathematics
Hampshire College
Amherst, Massachusetts 01002

For further information or additional application forms, please write:

The cost of the Summer Studies to participants will be \$460. This includes, full room and board (July 11-August 21), health coverage at the University of Massachusetts Health Services, and the recreation fee. A limited amount of financial aid is available to help meet the expenses of qualified students who would otherwise be unable to attend. Candidates wishing to apply for financial aid should so indicate on the application form. Admission to the Summer Studies will not be based on financial need.

David C. Kelly, Director
Summer Studies in Mathematics
Hampshire College
Amherst, Massachusetts 01002



The sixth

Hampshire College Summer Studies in Mathematics

for high ability high school students
supported by the National Science Foundation

July 11 - August 21, 1976

Hampshire College Amherst, Massachusetts