

4th Grade

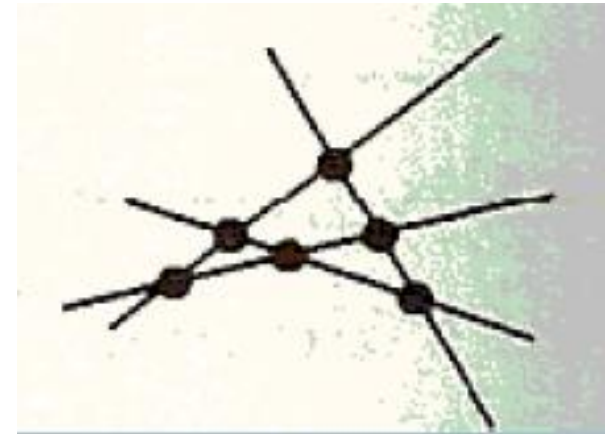
- From MCTM 4th grade Concepts Samples, 2008: What is the value of the missing term?
106, 92, 78, ____, 50, 36, 22?
-
- To extend: How could formula be described?
-

- From MCTM 4th grade Concepts Samples, 2008:
Write an expression, involving N, to describe the outcome of the data in the table:

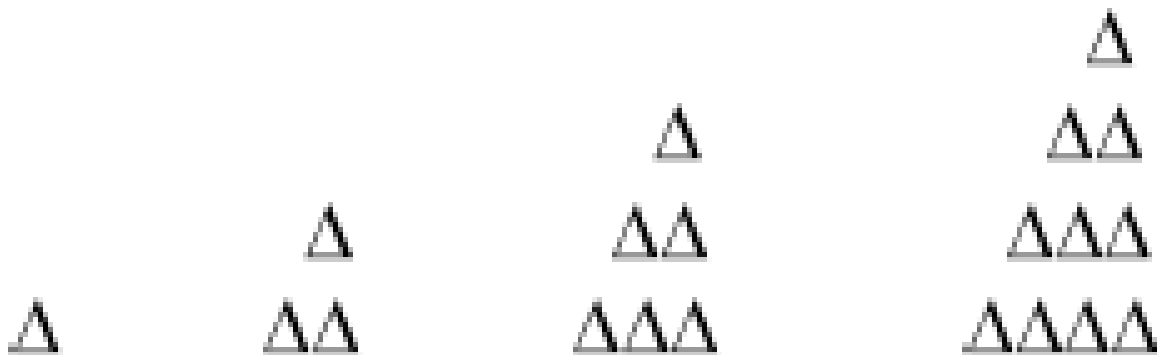
N	Outcome
44	11
56	14
72	18
84	21

- http://nlvm.usu.edu/en/nav/frames_asid_191_g_3_t_2.html function machine to try and match the pattern
- Can predict pattern—they move into symbolic rules to describe pattern in higher grades—is GLE 1B for all grades.
- Show <http://nlvm.usu.edu/> and <http://illuminations.nctm.org/> for info on lots of other such activities.

- (GLE 1A) Four straight lines can cross in as many as six points, as shown.
- What is the greatest number of points in which five straight lines can cross
- (Source-Math Contests from the Math League, Grade 4, 1999-2000 Contest).
- 39% got right on pretest



- From MCTM 4th grade Problem Solving Samples, 2009: Below you see the first four figures in a pattern made of triangles. How many triangles are in the 18th figure in this pattern??
- How might this problem be extended?



- http://enlvm.usu.edu/ma/nav/activity.jsp?sid=shared&cid=emready@patterns_relations_functions&lid=2 patterns—dot patterns, etc to find a formula involving n . GLE1A for 4th and 5th and GLE 1C for 6th-8th. Could also be 3A—model problem.