**Hexagon Task[[1]](#footnote-1)**

Trains 1, 2, 3 and 4 (shown below) are the first 4 trains in the hexagon pattern. The first train in this pattern consists of one regular hexagon. For each subsequent train, one additional hexagon is added.



 Train 1 Train 2 Train 3 Train 4

1. Compute the perimeter for each of the first four trains.
2. Draw the fifth train and compute the perimeter of the train.
3. Determine the perimeter of the 10th train without constructing it.
4. Write a description that could be used to compute the perimeter of any train in the pattern.
5. Determine which train has a perimeter of 110.
1. This task was adapted from *Visual Mathematics Course 1, Lessons 16-30* published by the Math Learning Center. Copyright © 1995 by The Math Learning Center, Salem, Oregon. [↑](#footnote-ref-1)