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Module 11 Transformation of Shapes

## Set 1

(1) How many circles are in the $5^{\text {th }}$ term of the sequence?



$\left.\begin{array}{|c|c|}\hline \text { Term } & \text { Number } \\ \hline 1 & 1 \\ \hline 2 & 3 \\ \hline 3 & 6 \\ \hline 4 & 10 \\ \hline 5 & 10+5=15\end{array}\right\}+2$

There are 15 circles in the $5^{\text {th }}$ term.
(2) What is the $48^{\text {th }}$ term of the sequence?


Each multiple of four is a rhombus.
48 is a multiple of 4.
The $48^{\text {th }}$ term is a $\square$ , a rhombus.
(3) We see the first three terms of a self-similar box pattern. Identify the rule for the pattern. Then, draw the fourth term.


Divide a square into nine smaller squares and cut out the center side squares.


## Set 2

(1) Tell whether each tessellation is regular, semi-regular, or neither.


Semi-Regular

Regular

## NAME

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Module 11 Transformation of Shapes
Lesson 5 Tessellations
(2) Create a tessellation using the figure.

## Possible answer:


(3) Use the set of regular polygons to make a semi-regular tessellation.

Possible answer:


