



Figure 1



Figure 2

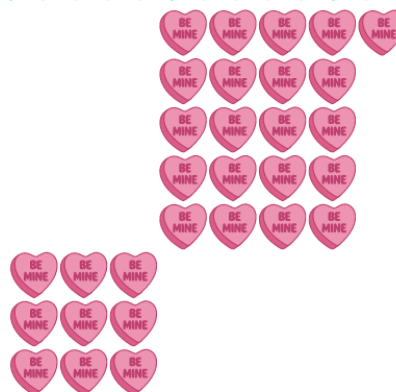


Figure 3

The first three figures of a visual pattern of sweethearts are shown.

- a. What do you notice about the pattern? What do you wonder?

- b. What would Figure 4 look like? Describe it in words or draw a picture.

- c. How many sweethearts are in Figure 5? How do you know?

- d. Write a rule for the number of sweethearts in Figure n . Prove that your rule works.

- e. Can you come up with an alternate way to write the rule for the number of sweethearts in Figure n ? Show why this rule also works.