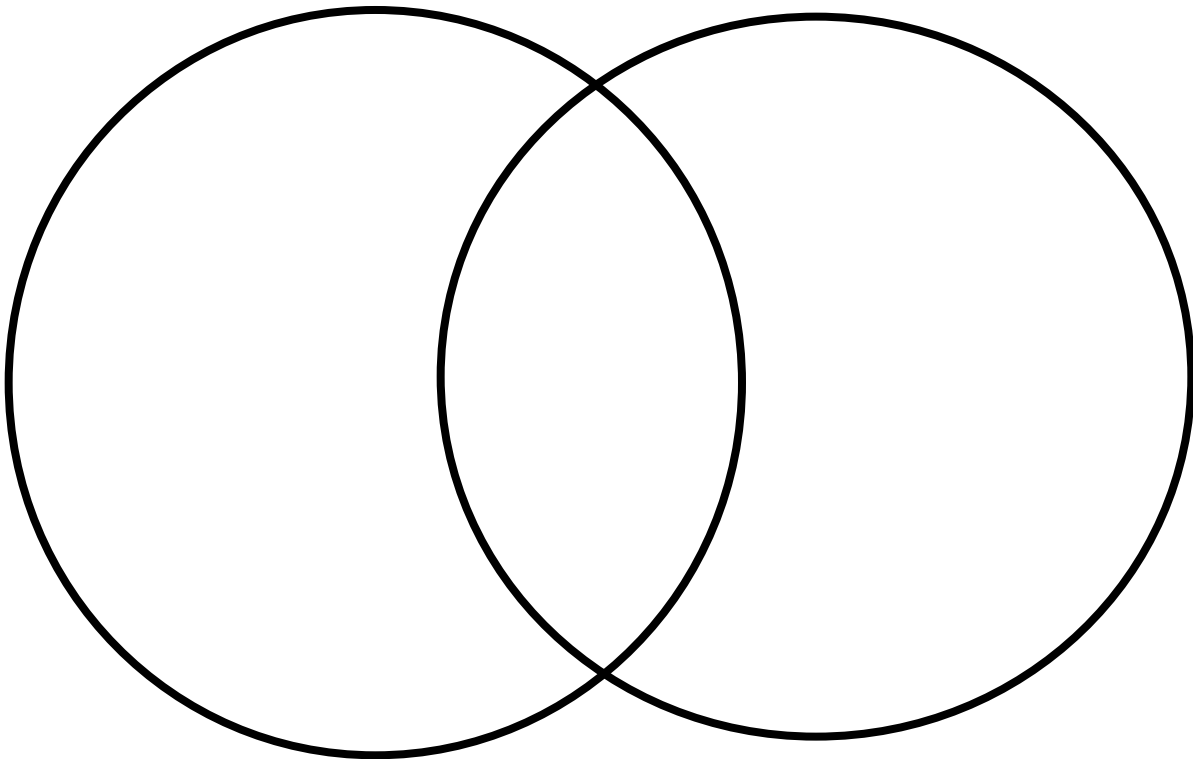


Chapter 1 Closure and Practice

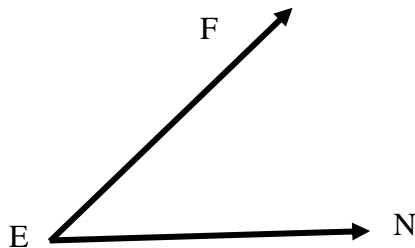
1. Using your polygon organizer to classify the polygons using the following Venn diagram. Be sure to classify at least 10 polygons in the organizer. Use the names of the polygons rather than drawing them.

Has reflection symmetry

Has four sides



2. Which of the following is the correct symbol for the angle shown.



- a) $\angle EFN$ b) $\angle NFE$ c) $\angle FEN$ d) $\angle F$

3. Solve the following equations.

a) $6x - 19 = 14$

c) $6 - 2(x + 8) = 4x + 14$

b) $10x - 42 = 4x + 14$

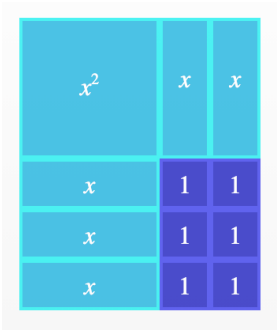
4. Given the following: $x^2 + 6x + 9$

a) Use your Algebra Tiles to create a Rectangle. Draw the rectangle

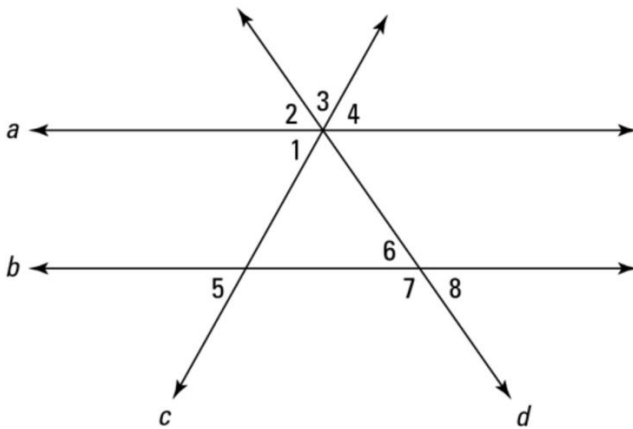
b) Write the product (length x width) from your rectangle).

c) Write the equation: *expression as a sum = expression as a product*

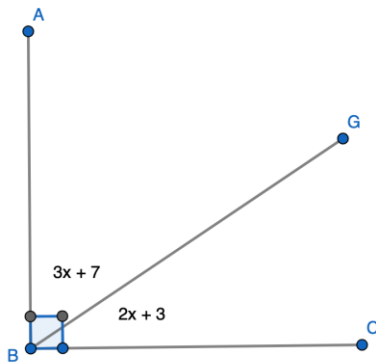
5. Using the diagram below, write an equation that shows that the area of the rectangle written as a sum is equivalent to the area written as a product.



6. Lines a and b are parallel. The measure of angle 6 is 47° . The measure of angle 1 is 65° . Find the measure of the other angles.



7. Using the information provided write an equation to solve for x then find the measure of $\angle ABG$



Modeling Question:

Angeni made some multi-story houses using toothpicks.



Figure 1



Figure 2



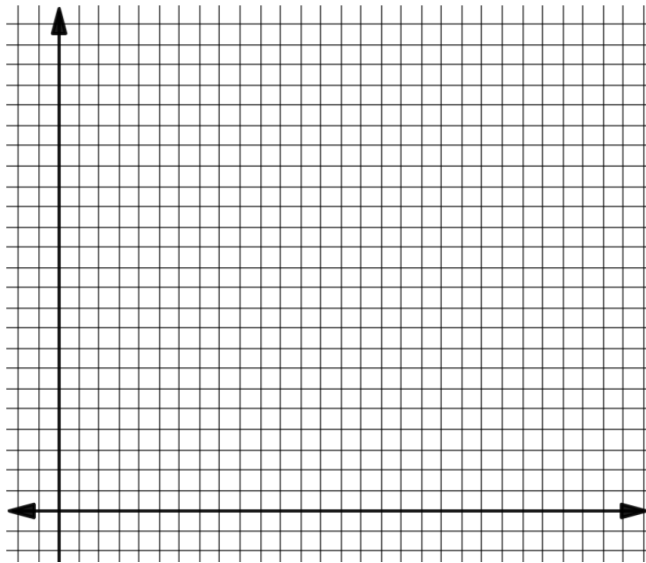
Figure 3

She thinks she will need 32 toothpicks to make the next house in the pattern shown above. Decide whether Angeni is correct by: a) Drawing the next house (Figure 4) above.

b) Complete the table for the number of toothpicks for figures 1 to 5 and for figure 20

Figure #	1	2	3	4	5	20
# of Toothpicks						

c) Plot the graph of the # of toothpicks (y) vs. the figure number (x). Label the axes.



d) Generalize the patterns you have found by writing an equation that will calculate the # of toothpicks for any figure number. That is, how many toothpicks in Figure “n”?