Section C: Practice Problems

1. a. List the first ten numbers starting at 0 and counting by 5s.

   b. List the first ten numbers starting at 0 and counting by 10s.

   c. What patterns do you observe between your two lists of numbers?

(From Unit 7, Lesson 9.)

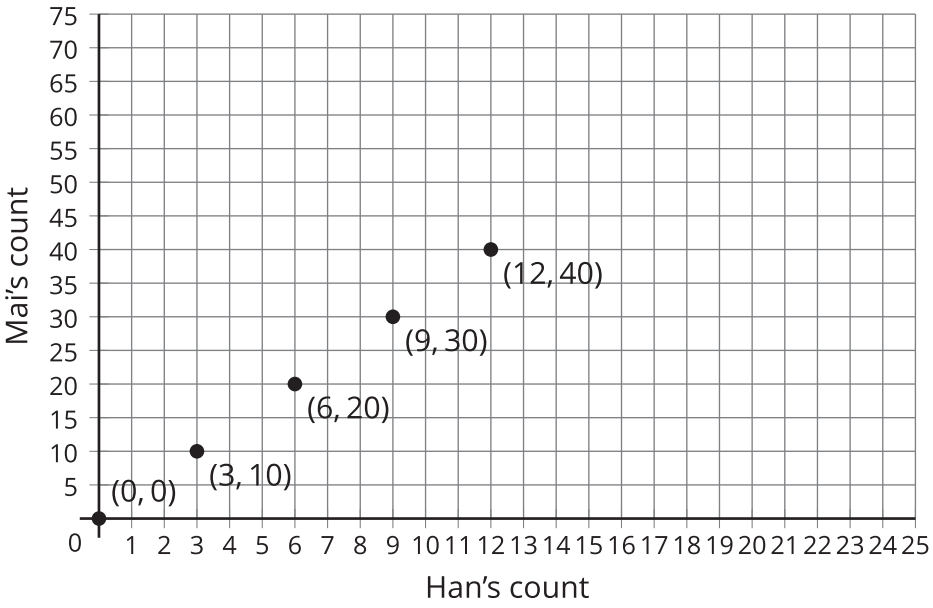
2. a. List the first ten numbers starting at 0 and counting by 6.

   b. List the first ten numbers starting at 4 and counting by 6.

   c. When the first list has the number 222, what number will be on the second list? Explain or show your reasoning.

(From Unit 7, Lesson 10.)

3. The points on the graph, starting in the bottom left and moving up and to the right, represent how Han and Mai counted.



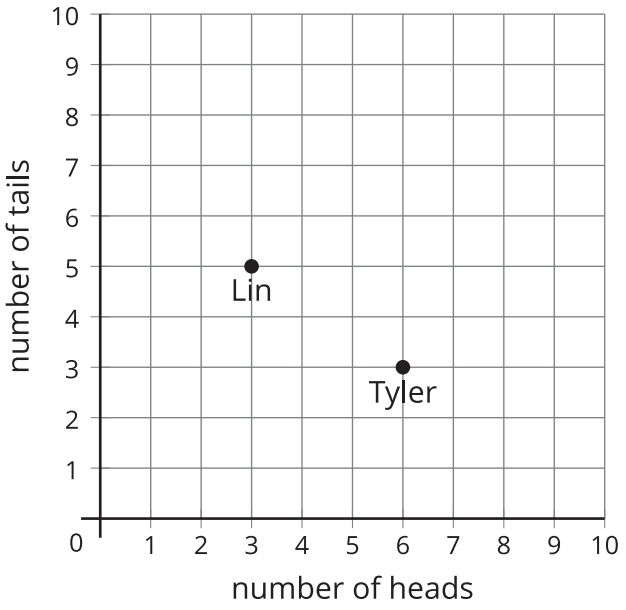
a. How much is Han adding each time in his count? Explain how you know.

b. How much is Mai adding each time in her count? Explain you know.

c. Name and locate 3 more points on the graph.

(From Unit 7, Lesson 11.)

4. The points on the graph show the results Lin and Tyler got when they tossed a coin.

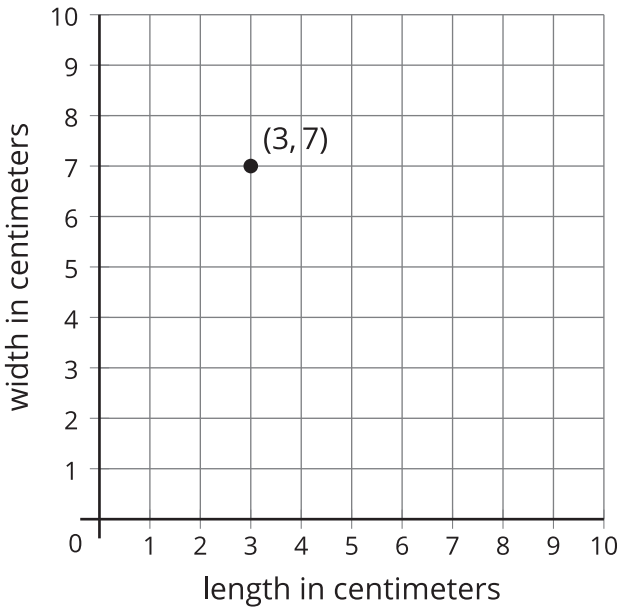


a. Who tossed the coin more times, Lin or Tyler? Explain or show your reasoning.

b. Who got more tails, Lin or Tyler? Explain or show your reasoning.

c. Toss a coin 7 times and plot the point on the graph. Explain or show your reasoning.

(From Unit 7, Lesson 12.)



5. a. The point on the graph shows the length and width of a rectangle. What is the perimeter of the rectangle?

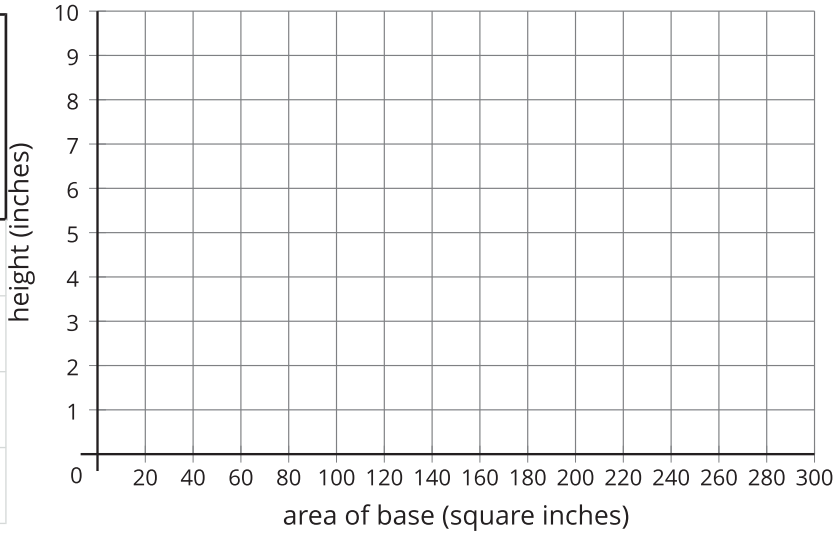
b. Plot 4 more points for different rectangles with the same perimeter as the given rectangle.

c. Which point would represent a square with the same perimeter as the given rectangle?

(From Unit 7, Lesson 13.)

6. **Exploration**

area of base (square inches)	height (inches)



a. The volume of a box is 240 cubic inches. List some possible values for the area of the base of the box and for its height in the table.

b. Plot several different possible area and height pairs on the graph.

c. What do you notice about the points on the graph?

d. Which point do you think represents the most reasonable measurements for the box? Explain your reasoning.

7. **Exploration**

   - Andre starts from 2 and counts by 6s.
   - Clare starts at 1,000 and counts back by 7s.

   a. List the first 6 numbers Andre and Clare say.

   b. Do Andre and Clare ever say the same number in the same spot on their lists? Explain or show your reasoning.