Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Patterns Quiz**

1. Draw a repeating pattern using shapes where two attributes change. Circle the core of your pattern.

The two attributes that change are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Write the next three numbers in each of the patterns below

3, 6, 9, 12, \_\_\_\_, \_\_\_\_, \_\_\_\_

27, 32, 37, 42, \_\_\_\_, \_\_\_\_, \_\_\_\_

24, 30, 36, 42, \_\_\_\_, \_\_\_\_, \_\_\_\_\_

32, 28, 24, 20, \_\_\_\_, \_\_\_\_, \_\_\_\_

63, 54, 45 , 36, \_\_\_\_, \_\_\_\_, \_\_\_\_

1. Use the following pattern rules to write the first 5 numbers of each pattern

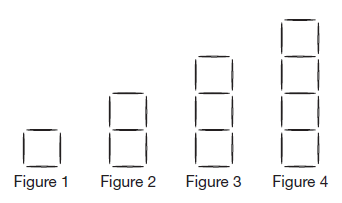
Start at 0. Add 8 each time \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Start at 40. Subtract 5 each time \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Start at 28. Add 7 each time \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Start at 56. Subtract 8 each time \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

1. Horatio uses toothpicks to make the pattern below.



How many toothpicks does he need to make figure 7 and figure 8?

Figure 7 \_\_\_\_\_\_\_\_\_ toothpicks Figure 8 \_\_\_\_\_\_\_\_ toothpicks