**Learning Target:** Describe, extend, and complete number patterns.



### Explore and Grow

Create a number pattern using four of the numbers below. Write the four numbers in the pattern.

30

125

140

90

130

120

0

135

150

60

Have your partner extend the pattern.

How can you describe the pattern?



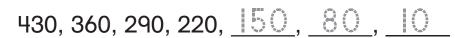
### Think and Grow

This pattern starts at 150. Each number is 25 more. So, the rule is "add 25."

150, 175, 200, 225, <u>250</u>, <u>275</u>, <u>300</u>



This pattern starts at 430. Each number is 70 less. So, the rule is "subtract 70."





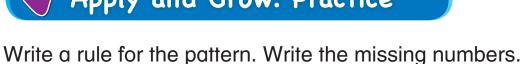
### Show and Grow

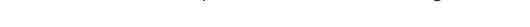
Write a rule for the pattern. Write the missing numbers.

- **1.** 58, 158, 258, 358, \_\_\_\_\_, \_\_\_\_, \_\_\_\_
- **2.** 931, 933, 935, 937, \_\_\_\_\_, \_\_\_\_
- **3.** 630, 615, 600, 585, \_\_\_\_\_, \_\_\_\_, \_\_\_\_
- **4.** 800, 770, 740, 710, \_\_\_\_\_, \_\_\_\_
- **5.** 0, 140, 280, 420, \_\_\_\_\_, \_\_\_\_



# Apply and Grow: Practice





**6.** 350, 370, 390, 410, \_\_\_\_\_, \_\_\_\_

Complete the pattern. Write the missing numbers.

12. DIG DEEPER! Extend the pattern. Write the missing numbers.



### Think and Grow: Modeling Real Life

Each year, Newton measures the distance from the water to the end of the sand on a beach. The distances follow a pattern. Complete the table. Is the distance less than 110 feet in 2018? How do you know?

Yes	No				



### Show and Grow

13. The same number of students have their picture taken each hour. Complete the table. Will all of the students have their picture taken by 3:00? How do you know?

Yes No

Time	Students who still need picture taken
9:00	275
10:00	230
11:00	
12:00	140
1:00	95
2:00	
3:00	

**Learning Target:** Describe, extend, and complete number patterns.

This pattern starts at 406. Each number is 30 more. So, the rule is "add 30."

406, 436, 466, 496, <u>526</u>, <u>556</u>, <u>586</u>



This pattern starts at 75. Each number is 2 less. So, the rule is "subtract 2."

75, 73, 71, 69, <u>67</u>, <u>65</u>, <u>63</u>



Write a rule for the pattern. Write the missing numbers.

- **2.** 265, 280, 295, 310, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
- **3.** 692, 682, 672, 662, \_\_\_\_\_, \_\_\_\_\_
- **4.** 24, 20, 16, 12, \_\_\_\_\_, \_\_\_\_

Complete the pattern. Write the missing numbers.

- **5.** 516, 525, \_\_\_\_\_, 543, \_\_\_\_\_, 561, \_\_\_\_\_
- **6.** 375, 350, \_\_\_\_\_, 300, \_\_\_\_\_, 225

7. Patterns Write a rule for the pattern below. Then write a pattern of 5 different numbers that uses the same rule.

48, 60, 72, 84, 96

8.	Modeling Real Life The number of pages of a book you					
	have left to read each day follows a pattern. Complete					
	the table. Will you finish reading the book after 8 days?					

Day	I	2	3	4	5	6	7
Number of pages left	56	48		32		16	

Yes No

How do you know?

# Review & Refresh

**9.** There are 50 water balloons in a bucket. 17 are green. 11 are pink. The rest are yellow. How many water balloons are yellow?

\_\_\_\_\_ yellow water balloons