

Name \_\_\_\_\_

Date \_\_\_\_\_

**LESSON 2.1**

**Practice B**

*For use with pages 72-78*

**Sketch the next figure in the pattern.**



**Describe a pattern in the numbers. Write the next number in the pattern.**

4. 113, 224, 335, 446,...

5. 4, 6, 9, 13, 18,...

7.  $\frac{7}{8}, \frac{6}{7}, \frac{5}{6}, \frac{4}{5}, \dots$

8. 3, 0, -3, -6,...

9. 2, 3, 5, 7, 11,...

**Show the conjecture is false by finding a counterexample.**

15. The quotient of two whole numbers is a whole number.

16. The difference of the absolute value of two numbers is positive, meaning  $|a - b| > 0$ .

17. If  $m \neq -1$ , then  $\frac{m}{m+1} < 1$ .

18. The Square root of a number  $x$  is always less than  $x$

**Write a function rule relating  $x$  and  $y$ .**

19.

$x$	1	2	3
$y$	1	8	27

20.

$x$	1	2	3
$y$	-5	-3	-1

21.

$x$	1	2	4
$y$	1	0.5	0.25

22. **Chemistry** The half-life of an isotope is the amount of time it takes for half of the isotope to decay. Suppose you begin with 25 grams of Platinum-191, which has a half-life of 3 days. How many days will it take before there is less than 1 gram of the isotope?