NAME _____ DATE _____

Practice A

For use with pages 3–9

Sketch the next figure in the pattern.

1.

2.

3.

4.
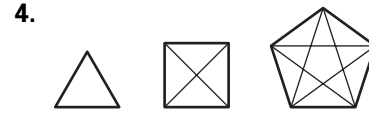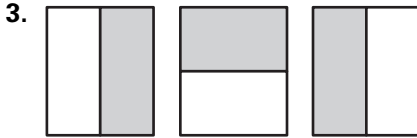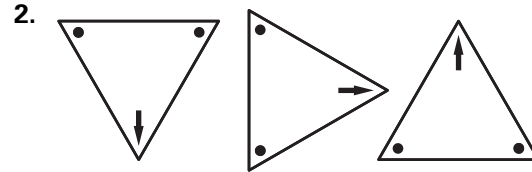
Describe a pattern in the sequence of numbers. Predict the next number.

5. 2, 5, 8, 11, . . .

6. 27, 9, 3, 1, . . .

7. 123, 234, 345, 456, . . .
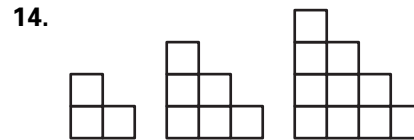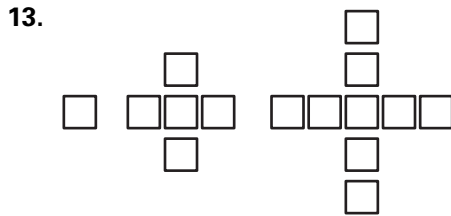
8. 5, 7, 11, 17, 25, . . .

9. $\dfrac{1}{2}, \dfrac{2}{3}, \dfrac{3}{4}, \dfrac{4}{5}, \ldots$

10. $\dfrac{5}{4}, \dfrac{4}{6}, \dfrac{3}{8}, \dfrac{2}{10}, \ldots$

11. 4, 1, -2, -5, . . .

12. 1, 4, 9, 16, . . .

The first three objects in a pattern are shown. How many squares are in the next object?

13.

14.

Complete the conjecture based on the pattern you observe in the specific cases.

15. The product of an odd number and an even number is ___?___.

$3 \cdot 8 = 24$ $6 \cdot 5 = 30$
$11 \cdot 24 = 264$ $102 \cdot 31 = 3162$

16. The sum of an odd number and an even number is ___?___.

$17 + 22 = 39$ $8 + 37 = 45$
$135 + 48 = 183$ $94 + 85 = 179$