Name _____ Date _____

7.2 Practice A

In Exercises 1–4, find the value of each variable in the parallelogram.

1.

$y - 2$

17

$x + 3$

38

2.

$a + 5$

$3b°$

$111°$

15

3.

$124°$

$2u°$ $(v - 3)°$

4.

$t + 5$ $3s$

27 19

5.

$5a - 9$
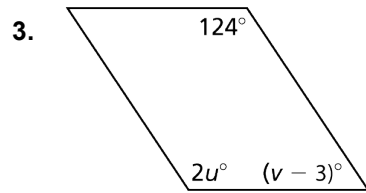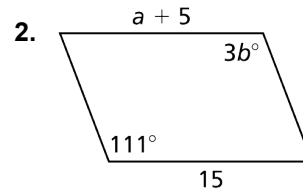
$(b + 84)°$

$3b°$

$3a + 5$

6.

$3x + 10$

124 $4(4y - 1)$

43

7.

$u°$

$3v°$ $66°$

8.

$\frac{1}{2}d$

$4c - 8$

$3c + 7$

$\frac{2}{3}d - 8$
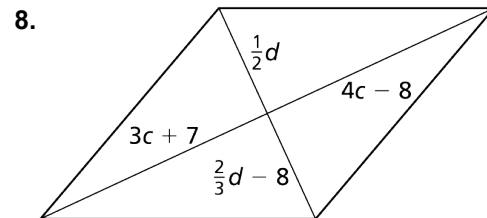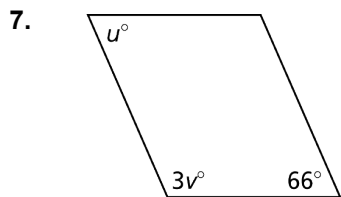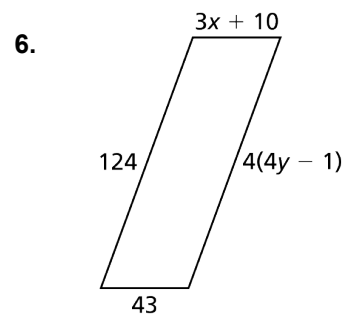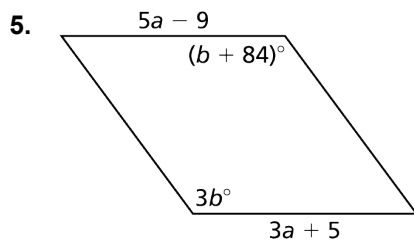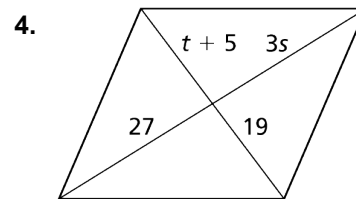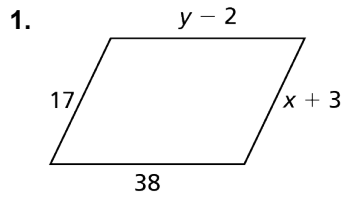
9. State whether each statement is *always, sometimes,* or *never* true for a parallelogram. Explain your reasoning.
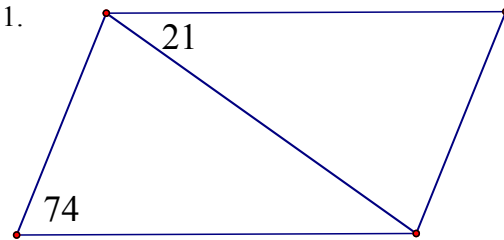
    a. The opposite sides are congruent.

    b. All four sides are congruent.

    c. The diagonals are congruent.

    d. The opposite angles are congruent.

    e. The adjacent angles are congruent.

    f. The adjacent angles are complementary.

Find the missing angles.

10.

11.

12.