Practice 9-1

Mixed Exercises

Find the value of *x* in each parallelogram.

1.

15
x

2.

x − 4
28

3.

10
2*x* − 4

4.

4*x* − 10
3*x* − 2

5. *AC* = 24

A   B
x
D   C

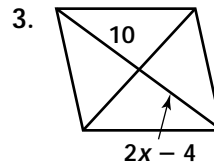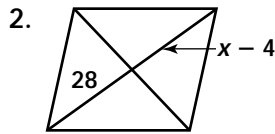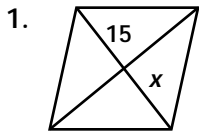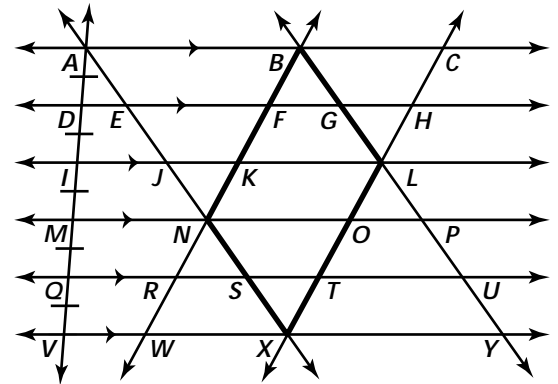**6.**

4*x* − 4
6*x* − 22

7. *x* = *EG*

E   F
4
H   G

8. *IK* = 35

I   4*x* + 3   J
L   K
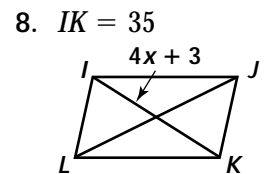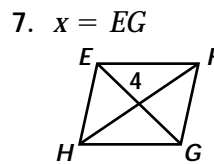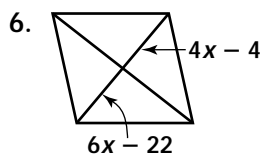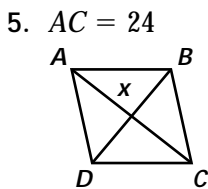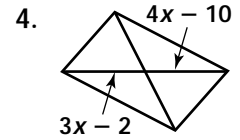
If *AE* = 17 and *BF* = 18, find the measures of the sides of parallelogram *BNXL*.

9. *BN*

10. *NX*

11. *XL*

12. *BL*

Find the measures of the numbered angles for each parallelogram.

13.

1
80°

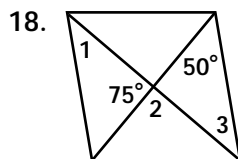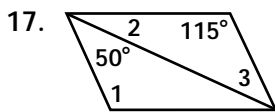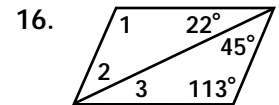**14.**

1   2
140°   3

15.

110°   3
1   2

16.

1   22°
45°
2
3   113°

17.

2   115°
50°
1   3

18.

1
50°
75°
2
3

19.

40°
1
47°
2   72°
3
4

20.

1   3
2
82°
30°
50°
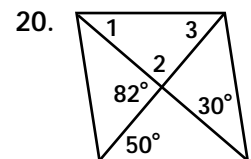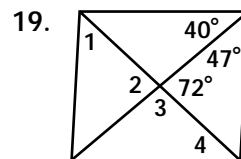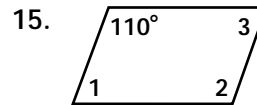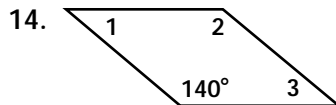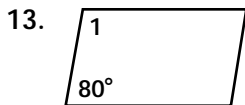
Find the length of $\overline{TI}$ in each parallelogram.

21.

T   I
18
E   16   L

22. $OR = \frac{7}{8}IO$

I   O
T   40   R

23. *TR* = 14, *ME* = 31

T   M
R
E   I

24. *IE* = 6, *GT* = 8

R   T
I
G   E