Name _____ **Hour** _____

Find the value of each variable in the parallelogram.

1.

$b + 2$

$a - 3$ 14

7

2.

$c - 5$

$(d + 15)°$

68°

20

3.

$h - 8$

$g + 7$

15   12

4.

31

$4j + 9$

$6j - 5$

$7k - 4$

5.

$9m + 21$

$3n + 38$ $11n + 14$

$15m - 21$

6.

12

27

$2y + 9$

$3x + 6$

7.

$(f + 30)°$

25     $8g - 3$

72°

8.

$3j$ $6k$

$k + 10$ $5j - 9$

9.

106° $(7a - 3)°$

$(9b - 2)°$

10.

$4c + 5$

$(6d + 9)°$

$(10d - 27)°$

$7c - 13$

11. $8t - 30$

$9v - 13$

$2t + 5$ $4t + 6$

12.

$(9h - 4)°$

$(6g - 14)°$

$(3g + 5)°$
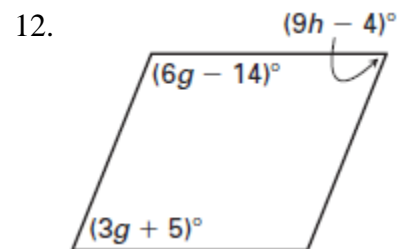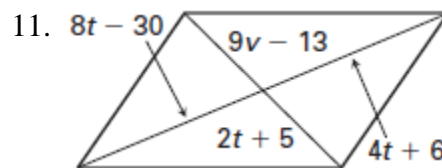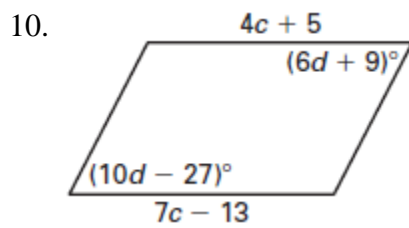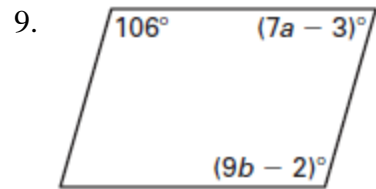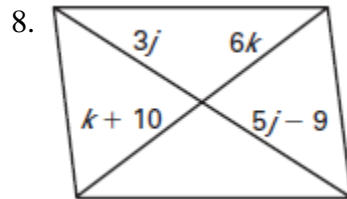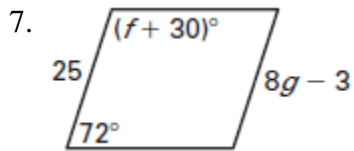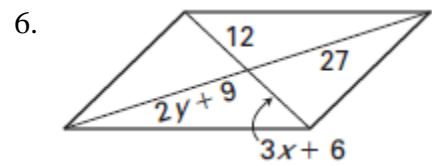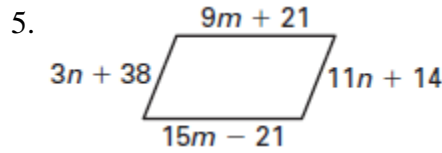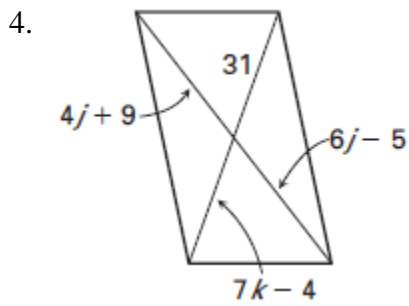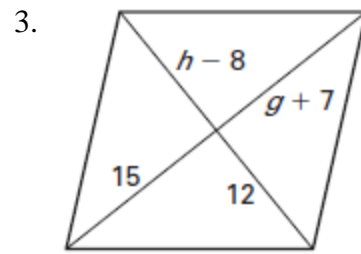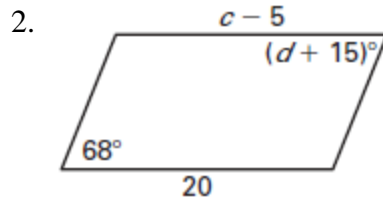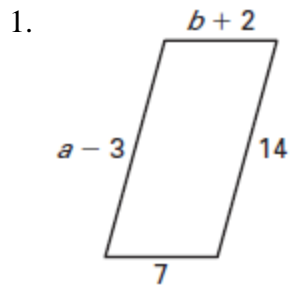
Find the indicated angle measure in □ABCD.

13. $m\angle AEB$ 14. $m\angle BAE$

15. $m\angle BCD$ 16. $m\angle ADC$

17. Find the sum of the interior angles of a decagon.

18. Find the measure of an exterior angle of a regular octagon.
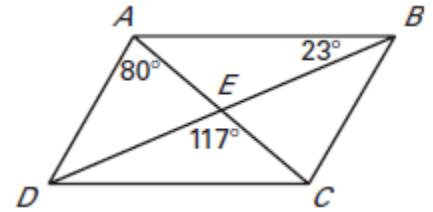
19. Find the sum of the exterior angles of an 11-gon.

20. Find the measure of an interior angle of a regular heptagon.

21. The sum of the interior angles of a polygon is 2520°. Classify the polygon by the number of sides.

22. The measure of an exterior angle of a regular polygon is 72°. Classify the polygon by the number of sides.

23. The measure of an interior angle of a regular polygon is 160°. Classify the polygon by the number of sides.

Find the value of x.

24.

25.

26.