

Review 8.1-8.3

What is the formula to find the sum on the interior angles of a convex polygon?

The sum of the exterior angles of a convex polygon is ALWAYS _____.

Find the sum of the measures of the interior angles of the indicated convex polygon.

1. Decagon	2. 13-gon	3. hexagon
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Classify the polygon by the # of sides if the sum of the measures of the interior angles is given.

4. 900°	5. 8640°	6. 180°
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Find the value of x .

<p>7.</p> <p>A quadrilateral with exterior angles labeled x°, 67°, 96°, and 59°.</p>	<p>8.</p> <p>A pentagon with interior angles labeled 105°, 142°, 140°, 124°, and x°.</p>
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Find the measure of an interior angle and an exterior angle of the REGULAR polygon.

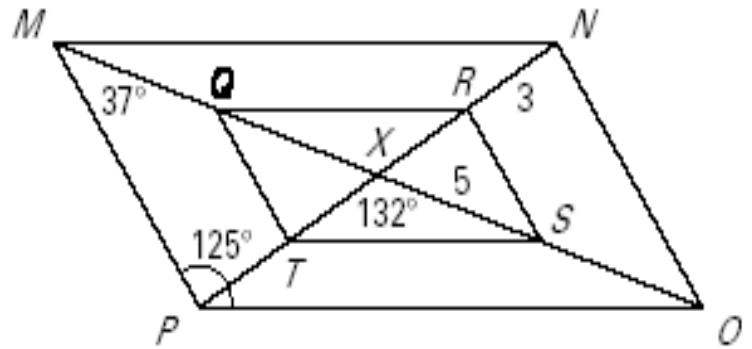
9. Regular decagon	10. Regular 30-gon	11. Regular 45-gon
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Find the value of n for each regular n -gon described.

12. Each interior angle of the regular n -gon has a measure of 165° .
13. Each exterior angle of the regular n -gon has a measure of 40° .

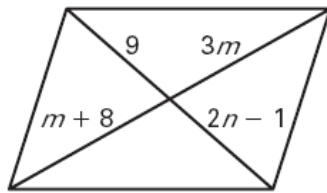
MNOP is a parallelogram. Points Q, R, S, and T are midpoints of \overline{MX} , \overline{NX} , \overline{OX} , and \overline{PX} .

14. $PN =$ 15. $MQ =$
 16. $XO =$ 17. $m\angle NMQ =$
 18. $m\angle NXO =$ 19. $m\angle MNP =$
 20. $m\angle NPO =$ 21. $m\angle NOP =$

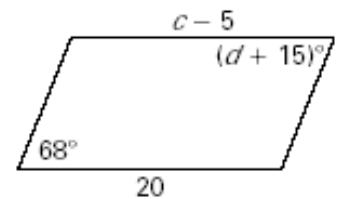


Find the value of each variable in the parallelogram.

22.

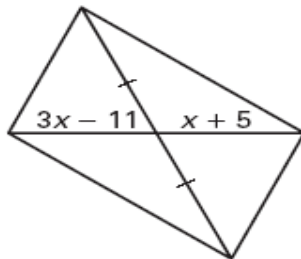


23.

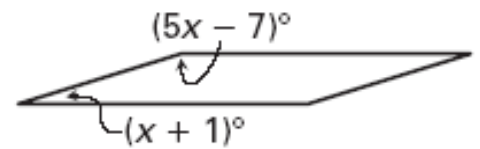


Find the values of x that ensure each quadrilateral is a parallelogram.

24.



25.



Draw quadrilateral ABCD in the coordinate plane and then determine whether it's a parallelogram. Explain your reasoning.

26. A(-2, 3) B(3, 2) C(3, -1) D(-2, 0)

