

Practice 15

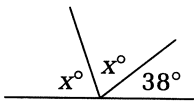
For use with Section 2-7

Solve each equation.

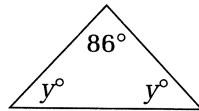
- | | | |
|-------------------|----------------------|------------------------|
| 1. $a + 25 = 13$ | 2. $b + 12 = -8$ | 3. $r - 15 = -2$ |
| 4. $7 + d = 22$ | 5. $-3 + q = 5$ | 6. $u + 17 = 17$ |
| 7. $5j = 60$ | 8. $7p = 63$ | 9. $10y = 180$ |
| 10. $2n - 5 = 17$ | 11. $9 + 2m = 35$ | 12. $3x - 7 = 41$ |
| 13. $6 = 4k - 30$ | 14. $y + y - 9 = 55$ | 15. $c + 10 + c = 18$ |
| 16. $8 + 7w = 29$ | 17. $3b - b + 5 = 7$ | 18. $8t - 19 + t = 35$ |

Write and solve an equation to find each unknown angle measure in each figure. (Note: The sum of the measures of the angles of a quadrilateral is 360° .)

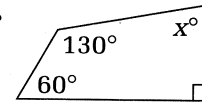
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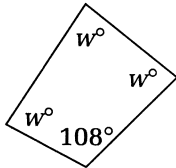
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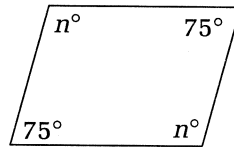
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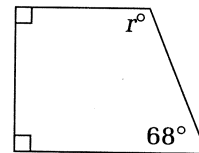
22.



23.



24.



25. The perimeter of a trapezoid is 25 cm. Three sides of the trapezoid have length x cm. The fourth side has length 7 cm. Write and solve an equation to find the value of x .
26. Two sides of a kite are each 34 in. long. Each of the other two sides has length y in. Suppose the perimeter of the kite is 104 in. Write and solve an equation to find y .

Yi-Qian jogs around her block to keep in shape. Her block is a rectangle. She has found that one side of the rectangle is twice as long as the other. Suppose x stands for the length of the shorter side of the rectangle.

27. Write an expression for the length of the longer side, using x .
28. Suppose the perimeter of the rectangle is 1440 ft. Write an equation to find x , and solve the equation.