

NAME \_\_\_\_\_

DATE \_\_\_\_\_

**Module 13** Solving Quadratic Equations  
of One Variable

**Lesson 4** Solving Quadratic Equations  
by Completing the Square



**additional  
practice**

**Complete the square.**

1.  $x^2 - 6x + \underline{\hspace{2cm}}$

2.  $x^2 + 10x + \underline{\hspace{2cm}}$

3.  $z^2 - 9z + \underline{\hspace{2cm}}$

4.  $T^2 + 13T + \underline{\hspace{2cm}}$

5.  $x^2 - \underline{\hspace{2cm}}x + 49$

6.  $v^2 + \underline{\hspace{2cm}}v + 225$

**Factor.**

7.  $m^2 + 20m + 100$   
\_\_\_\_\_

8.  $x^2 + 28x + 196$   
\_\_\_\_\_

9.  $x^2 - 15x + \frac{225}{4}$   
\_\_\_\_\_

10.  $n^2 - n + \frac{1}{4}$   
\_\_\_\_\_

**Solve.**

11.  $x^2 + 12x = 5$   
\_\_\_\_\_

12.  $y^2 + 16y = -8$   
\_\_\_\_\_

13.  $w^2 - 6w + 3 = 11$   
\_\_\_\_\_

14.  $h^2 - 24h + 47 = 2$   
\_\_\_\_\_

15.  $D^2 + 4D - 1 = 0$   
\_\_\_\_\_

16.  $x^2 - 14x + 13 = 0$   
\_\_\_\_\_

17.  $x^2 + 2x = 0$   
\_\_\_\_\_

18.  $M^2 = 10M$   
\_\_\_\_\_

19.  $5n^2 + 2 = 10n + 37$   
\_\_\_\_\_

20.  $6x^2 + 8 = 80 - 24x$   
\_\_\_\_\_

21.  $4w^2 - 12w - 17 = 19$

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23.  $3x^2 + 7x = 13$

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22.  $2x^2 + 10x + 8 = 9$

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24.  $7x^2 + 6x = 9$

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