

NAME \_\_\_\_\_

DATE \_\_\_\_\_

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

**Lesson 1** Defining Quadratic Equations  
of One Variable



**additional  
practice**

**Determine if each equation is quadratic, linear, or neither.**

1.  $7 = 3x - 4$

\_\_\_\_\_

2.  $6x^2 + 2 = 5$

\_\_\_\_\_

3.  $8x^3 + 5x + 7 = 0$

\_\_\_\_\_

4.  $4x^2 = 8$

\_\_\_\_\_

5.  $6a^2 + 5a = 4$

\_\_\_\_\_

6.  $a(9a + 3) = 0$

\_\_\_\_\_

7.  $4^2g + 7g = 5$

\_\_\_\_\_

8.  $5^2c^2 + 4^3c - 2 = 0$

\_\_\_\_\_

9.  $3(2m - 1) = 5$

\_\_\_\_\_

10.  $m(3m + 6) = 0$

\_\_\_\_\_

11.  $w(4w + 3) = 4w^2 + 1$

\_\_\_\_\_

12.  $h^2(h - 4) = h + 1$

\_\_\_\_\_

13.  $c^3 + 3c = 8c$

\_\_\_\_\_

14.  $3^3t + 4t = 6t$

\_\_\_\_\_

**Determine if each equation is quadratic, linear, or neither. If it is a quadratic equation in one variable, put it into standard form and identify the coefficients  $a$ ,  $b$ , and  $c$ .**

15.  $d^2(d + 2) = d^3 + d^2$

\_\_\_\_\_

\_\_\_\_\_

16.  $3p^2 + 4p + 8 = p^2 + 1$

\_\_\_\_\_

\_\_\_\_\_

17.  $4z - 1 = z^3 + 3$

\_\_\_\_\_

\_\_\_\_\_

18.  $b^2(b - 2) = 3b + 4$

\_\_\_\_\_

\_\_\_\_\_

19.  $a(a + 4) = 2(a + 4)$

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21.  $(j^2 - 2)^2 + 4j^2 = j^4 + 6j - 3$

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23.  $(j^2 + 3)^2 + j^2 = j^4 - 2j^2$

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25.  $(c - 1)^2 = 3c + 4$

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27.  $(w^2 - 1)(w + 1) = 6$

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20.  $k^2 = 0$

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22.  $(2c + 3)^2 - 1 = 4c^2$

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24.  $(5v - 2)^2 + 3v = v - 1$

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26.  $(2q + 3)^2 - 2q = 4q + 1$

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28.  $(2b + 3)(b - 2) = b + 4$

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