

Name _____

9-6B Lesson Master**Questions on SPUR Objectives**

See pages 576–579 for objectives.

SKILLS Objective B

In 1–12, find all real solutions to the equations using the Quadratic Formula. Round your answers to the nearest hundredth.

1. $5a^2 - 2a + 1 = 0$

2. $-2b^2 + 5b + 3 = 0$

3. $25 - 20c + c^2 = 0$

4. $7d^2 - d = 3$

5. $-e^2 - 36 = 12e$

6. $3f^2 = 4f - 2$

7. $6g^2 + 18g = 54$

8. $h(3 - h) - 2.25 = 0$

9. $3(j + 7) = 7j^2$

10. $3k^2 - 6 = k$

11. $m^2 = 11(m - 2)$

12. $3(n - 9) = 2n(n - 7)$

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PROPERTIES Objective C

In 13–16, a quadratic equation is given.

- a. Find the discriminant.
b. Give the number of real solutions to the equation.

13. $23x^2 + 12x - 7 = 0$

a. _____

b. _____

14. $-4p^2 + 16p - 16 = 0$

a. _____

b. _____

15. $r = \frac{r^2}{5} + \frac{1}{2}$

a. _____

b. _____

16. $9s\left(s - \frac{1}{3}\right) = -6$

a. _____

b. _____

17. The discriminant of $12t^2 + bt + 7 = 0$ is -272 . Find the value(s) of b . _____

18. The discriminant of the equation $ax^2 + bx + c = 0$ is 0. How many x -intercepts are on the graph of this equation? _____

19. The discriminant of the equation $ax^2 + bx + c = 0$ is -24 . What does this indicate about the graph of $y = ax^2 + bx + c$? _____

20. An equation in the form $y = ax^2 + bx + c$ is graphed. Tell whether the value of the discriminant is positive, negative, or zero. _____

