

Name _____

13-7B Lesson Master**Questions on SPUR Objectives**

See pages 833–835 for objectives.

SKILLS Objective F

In 1–18, tell whether the number is rational or irrational.

1. $20.\bar{4}$

2. 3.2

3. $\sqrt{15}$

4. $\sqrt{32}$

5. $0.\bar{8}$

6. $\frac{4}{51}$

7. $3\sqrt{19}$

8. 0

9. $\sqrt{9}$

10. $\frac{413}{3,214}$

11. $3\frac{4}{32}$

12. $\frac{\sqrt{3}}{3}$

13. 9.123

14. $\frac{\pi}{3}$

15. $3\sqrt{3}$

16. $123.\bar{2}$

17. $-4\sqrt{600}$

18. -3

In 19–21, write the number as a simple fraction.

19. $3\frac{36}{66}$

20. $0.9\bar{3}$

21. $4.\overline{789}$

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In 22–24, write the number as a simple fraction.

22. $4\frac{5}{35}$

23. 0.324

24. $67.\overline{45}$

In 25 and 26, an equation is given. Determine whether the solutions of the equation are rational or irrational.

25. $5x^2 + 2x - 1 = 0$ _____

26. $9b^2 - 1 = 0$ _____

27. Is it possible for two irrational numbers to have a product that is a rational number? Explain why or why not.

28. Is it possible for two rational numbers to have a product that is an irrational number? Explain why or why not.

_____**REPRESENTATIONS** Objective I

29. The circumference of a circle is 6 inches.

a. What is the exact length of its radius? a. _____

b. Is this number rational or irrational? b. _____

30. a. In the triangle at the right, find the value of x .b. Determine if x is rational or irrational.

