Irrational Numbers Worksheet

Part A: Identify Rational or Irrational: Write **R** for Rational and **I** for Irrational.

1. _____ √16
2. _____ √7
3. _____ 0.25
4. _____ π
5. _____ -3
6. _____ √81
7. _____ √10
8. _____ 1.333333...
9. _____ √50
10. _____ 2.5

Part B: Determine Whether Each Number is Irrational - Circle **Yes** if the number is irrational and **No** if it is rational.

Number	Irrational?	Number	Irrational?
11. √2	Yes / No	15. 0.121221222...	Yes / No
12. 5/8	Yes / No	16. -7	Yes / No
13. √36	Yes / No	17. √11	Yes / No
14. π	Yes / No	18. 4.75	Yes / No

Part C: Simplify Square Roots - Simplify each radical.

19. √25 = _____
20. √49 = _____
21. √64 = _____
22. √100 = _____
23. √121 = _____
24. √144 = _____

Part D: Estimate Irrational Numbers - Estimate each irrational number to the nearest whole number.

25. √5 ≈ _____
26. √18 ≈ _____
27. √30 ≈ _____
28. √70 ≈ _____
29. √90 ≈ _____
30. √200 ≈ _____

Part E: Compare Irrational Numbers - Use **<, >, or =**.

31. √2 _____ 1
32. √16 _____ 4
33. √50 _____ 7
34. √81 _____ 9
35. √10 _____ 3
36. π _____ 3

Part F: Word Problems

37. A square garden has an area of 64 square feet. What is the length of one side?

    Answer: _____ feet

38. A square tile has an area of 49 square inches. What is the length of one side?

    Answer: _____ inches

39. A square room has an area of 20 square meters. Is the side length rational or irrational?

    Answer: _____

LIVEWORKSHEETS