Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period\_\_\_\_\_\_\_\_\_\_\_

Simplify each expression.

1. 2. 3.

4. 5. 6.

7. 8. 9.

Write each expression in radical form.

10. 11. 12. 13.

14. 15. 16. 17.

Write each expression in exponential form.

18. 19. 20. 21.

22. 23. 24. 25.

Write each expression in simplest form. Assume that all variables are positive.

26. 27. 28. 29.

30. 31. 32. 33.

34. 35. 36.

37. 38. 39. 40.

41. 42. 43. 44.

45. 46.

47. The rate of inflation I that raises the cost of an item from the present value P to the future value F over t years is found using the formula . Round your answer to the nearest tenth.

a. What is the cost of inflation for which a television set costing $1000 today will become one costing $1500 in 3 years.

b. What is the rate of inflation that will result in the price P doubling ( F = 2P) in 10 years?