

4-3**Practice****Prime Factorization**

Determine whether each number is *prime* or *composite*.

1. 11

2. 63

3. 73

4. 75

5. 49

6. 69

7. 53

8. 83

Write the prime factorization of each number. Use exponents for repeated factors.

9. 33

10. 24

11. 72

12. 276

13. 85

14. 1024

15. 95

16. 200

17. 243

18. 735

Factor each monomial.

19. $35v$

20. $49c^2$

21. $-14b^3$

22. $-81h^2$

23. $33wz$

24. $-56ghj$

25. **NUMBER THEORY** *Twin primes* are a pair of consecutive odd primes, which differ by 2. For example, 3 and 5 are twin primes. Find the twin primes less than 100. (Hint: There are 8 pairs of twins less than 100.)