7.1 Factors and Greatest Common Factors

(refer to pages 456-458 for extra help)

Complete the prime factorization of each number.

 1. 2.

 

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Find the GCF of each pair of numbers.

 3. 26 and 60

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 4. 15 and 40 5. 8 and 32

 6. 36 and 48 7. 50 and 75

Find the GCF of each pair of monomials.

 8. 12y3 and 15y2 9. 3p4 and 4p

 10. 18x6 and 24y2 11. 14xy2 and 21y3

Write the prime factorization of each number.

 12. 18 13. 120 14. 56

 15. 390 16. 144 17. 153

Find the GCF of each pair of numbers.

 18. 16 and 20 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 19. 9 and 36 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 20. 15 and 28 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 21. 35 and 42 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 22. 33 and 66 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 23. 100 and 120 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 24. 78 and 30 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 25. 84 and 42 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Find the GCF of each pair of monomials.

 26. 15x4 and 35x2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 27. 12p2 and 30q5 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 28. −6t3 and 9t \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 29. 27y3z and 45x2y \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 30. 12ab and 12 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 31. −8d3 and 14d4 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 32. −m8n4 and 3m6n \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 33. 10gh2 and 5h \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_