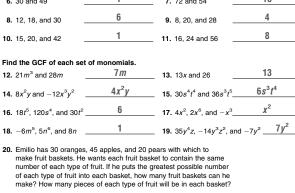
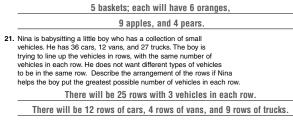
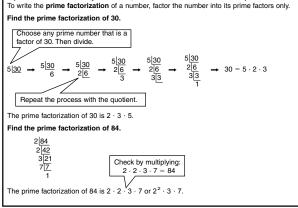
b. How many photographs will be in each row?

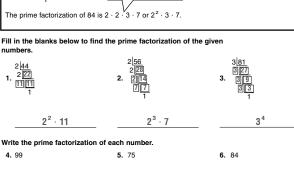
Practice A Practice B 8-1 Factors and Greatest Common Factors 8-1 Factors and Greatest Common Factors Complete the prime factorization of each number Write the prime factorization of each number 3. 56 3 $2^3 \cdot 3 \cdot 5$ $2^3 \cdot 7$ 4. 390 **6.** 153 $3^2 \cdot 17$ $2^4\cdot 3^2$ $2\cdot 3\cdot 5\cdot 13$ 2 . 5 32 · 2 Find the GCF of each pair of numbers. Find the GCF of each pair of numbers. 7. 16 and 20 8. 9 and 36 4. 15 and 40 5. 8 and 32 7 9. 15 and 28 10. 35 and 42 20 33 6. 36 and 48 7. 50 and 75 11. 33 and 66 12. 100 and 120 42 12 25 13. 78 and 30 14 84 and 42 Find the GCF of each pair of monomials Find the GCF of each pair of monomials 8. $12y^3$ and $15y^2$ 3p⁴ and 4p $5x^2$ 6 15. 15x4 and 35x4 **16.** $12p^2$ and 30q9*y* 17. $-6t^3$ and 9t **18.** $27y^3z$ and $45x^2$ 10. 18x⁶ and 24v² **11.** $14xy^2$ and $21y^3$ $2d^3$ 12 19. 12ab and 12 6 $7v^2$ $m^6 n$ 5h**21.** $-m^8n^4$ and $3m^6n$ 22. 10ah2 and 5h Mrs. Graham is creating student envelopes for a math activity in her class. She has 64 problems written on pieces of blue paper and 48 problems written on pieces of red paper. She needs to sort the pieces 23. Kirstin is decorating her bedroom wall with photographs. She has 36 photographs of family and 28 photographs of friends. of paper so that each envelope has the same number of pieces and She wants to arrange the photographs in rows so that each row has the same number of photographs, and photographs of family no envelope has both red and blue pieces. 12. If Mrs. Graham puts the greatest possible number of and photographs of friends do not appear in the same row. papers in each envelope, how many papers will go in a. How many rows will there be if Kirstin puts the greatest possible each envelope? number of photographs in each row? 13. How many envelopes can Mrs. Graham create 16 if she puts the greatest possible number of papers in each envelope? b. How many photographs will be in each row? Copyright © by Holt, Rinehart and Winston. All rights reserved. Holt Algebra 1 Copyright © by Holt, Rinehart and Winston. All rights reserved. Holt Algebra 1 3 4 Practice C 8-1 Factors and Greatest Common Factors Reteach Factors and Greatest Common Factors Write the prime factorization of each number. A prime number has exactly two factors, itself and 1. The number 1 is not a prime number. 3. 3500 To write the prime factorization of a number, factor the number into its prime factors only. Find the prime factorization of 30. $3 \cdot 5^2$ $\textbf{2}^2 \cdot \textbf{5}^3 \cdot \textbf{7}$ Choose any prime number that is a factor of 30. Then divide. Find the GCF of each set of numbers. 6 4. 18 and 36 18 5|30 → \rightarrow 30 = 5 · 2 · 3 18 6. 30 and 49 7. 72 and 54 4 8. 12, 18, and 30 9. 8, 20, and 28 Repeat the process with the quotient. 8 1 10. 15, 20, and 42 The prime factorization of 30 is 2 · 3 · 5 Find the prime factorization of 84. 2 84 7m13 13. 13x and 26 Check by multiplying: $4x^2y$ **14.** $8x^2y$ and $-12x^3y^2$ **15.** $30s^4t^4$ and $36s^3t^4$





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 $3 \cdot 5^2$

 $\textbf{2^2} \cdot \textbf{3} \cdot \textbf{7}$