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## Unit 3: Factors Review Worksheet

I. Divisibility Rules - Determine if the following numbers are divisible by $2,3,4,5,6,8,9$, and 10 . Write the number it is divisible by on the line provided.

1. 1440
2. 1080
3. 4862
II. Factors - Write the factors of the following numbers.
4. 56
5. 64
6. 100
III. Prime and Composite Numbers - Determine whether each number is prime or composite.
7. 8 $\qquad$
8. 31 $\qquad$
9. 7 $\qquad$
10. 12
11. 2
12. 9
$\qquad$
$\qquad$
IV. Prime Factorization - Write the prime factorization of each number.
13. 44
14. 86
15. 99
V. GCF (Greatest Common Factor) - Find the GCF for each set of numbers.
16. 27 and 54

GCF: $\qquad$
17. 32,56 , and 96

GCF: $\qquad$
18. 14,42 , and 70

GCF: $\qquad$
VI. Word Problems - Answer each word problem.
19. Jerry is making treat bags for a party. He has 54 candy bars, 63 balloons, and 90 small toys. He wants each bag to have the same number of candy bars, balloons, and small toys without any left over. What is the greatest number of bags he can make? How man candy bars will be in each bag? How many balloons will be in each bag? How many small toys will be in each bag?

Total Bags: $\qquad$

Number of Candy Bars in each Bag: $\qquad$

Number of Balloons in each Bag: $\qquad$

Number of Small Toys in each Bag: $\qquad$
20. Susie is making gift stocking for children at a hospital. She wants to put in equal numbers of candy canes, small toys, and chocolates. She has 32 candy canes, 72 small toys, and 96 chocolates. How many stocking can she fill if she doesn't want anything left over? How many candy canes will be in each stocking? How many small toys will be in each stocking? How many chocolates will be in each stocking?

Total Stockings: $\qquad$

Number of Candy Canes in each Stocking: $\qquad$

Number of Small Toys in each Stocking: $\qquad$

Number of Chocolates in each Stocking: $\qquad$
VII. Equivalent Expressions using GCF and the Distributive Property - Factor the sum of terms as a product of the GCF and a sum.
21. $26+39$
22. $12 n+18$
23. $72 x+84 x$
$\qquad$
$\qquad$
VIII. Numerical and Algebraic Equivalent Expressions - Write 4 equivalent expressions for each expression.
24. $32+40$ $\qquad$
$\qquad$
$\qquad$
$\qquad$
25. $28 y+49$

