

Name _____ Hour _____

GCF Factoring

Write the prime factorization of each monomial.

1. $90x^3y^2$

2. $169xy^4$

3. $72x^2y^2$

Find the greatest common factor for the set of numbers/monomials.

4. 6, 9

5. 27, 54, 81

6. 16, 24, 48

7. $4x$, $10x$, $16x$

8. $9abc$, $3a^2b$, $6ac^2$

9. $25m^4n^3$, $15m^3n$, $45m^2n^2$

Factor each expression.

10. $8r - 40$

11. $12u + 20$

12. $-35z + 7$

13. $h^2 + 17h$

14. $2d^3 - 9d^2$

15. $6f^5 + 18f^3$

16. $3x^3y - 21xy^2$

17. $36a^2b^2 + 24ab^3$

18. $18m^4n^3 - 63m^3n^5$

19. $21s^2 - 56s - 35$

20. $14e^3 - 42e + 70$

21. $4c^3 - 20c^2 + 8c$

22. What two numbers have a product of 64 and a sum of 20?

23. What two numbers have a product of 100 and a sum of -25 ?

24. What two numbers have a product of 180 and a sum of -29 ?

25. What two numbers have a product of -32 and a sum of 14?