Name:

Algebra

Review (5.1 – 5.6)

**Find the prime factorization of each number**

1. 22 2. 30

3. 72

**Find the greatest common factor**

4. 36, 90

**Simplify**

5. 4a2b / 16ab2 6. -6x2y3 / 9xy2

7. -8a2b / -20ab 8. -32cd3 / -24bd2

**Divide**

9. (8xy – 12x2) / 4x 10. (27y4 + 18y3 – 36y2) / 9y2

**Factor using the GCF**

11. 21a3 – 14a2 12. 3a3 + 6a2 – 12a

**Write each product as a trinomial**

13. (c + 2)(c + 6) 14. (k – 3)(k – 6)

15. (2a + 3)(a + 4) 16. (3x + 2)(x + 4)

**Write each product as a binomial**

17. (3x + 4y)(3x – 4y) 18. (x2 – 3y2)(x2 + 3y2)

**Factor**

19. b2 – 16 20. 49n2 – 1

**Write each square as a trinomial**

21. (x + 3)2 22. (3u – 1)2

**Factor each trinomial as a perfect square. If it is not, write not a perfect square**

23. n2 – 4n + 4 24. a2 – 4a + 16