

Algebra 1 B

Name _____

Unit 11 Review

Period _____ Date _____

Objective 1 – Find the GCF

1. 90, 75 1. _____

2. $48b^3, 64b^5$ 2. _____

3. $72x^2y^3, 30x^3y^2$ 3. _____

Objective 2 – Factor using GCF.

4. $21x - 7$ 4. _____

5. $15x^3 + 27x^2 - 6x$ 5. _____

6. $100x^3y^5 - 20x^4y^2 + 28x^5y^3$ 6. _____

Objective 3 – Factor each difference of squares. If not factorable, write prime.

7. $x^2 - 121$ 7. _____

8. $4x^2 + 25$ 8. _____

9. $81x^2 - 1$ 9. _____

10. $49x^2 - 36$ 10. _____

Objective 4 – Factor. If not factorable, write prime.

11. $x^2 + 8x + 15$

11. _____

12. $x^2 - 2x - 48$

12. _____

13. $x^2 + 10x - 24$

13. _____

14. $x^2 - 12xy + 20y^2$

14. _____

15. $x^2 - xy - 42y^2$

15. _____

Objective 5 – Factor. If not factorable, write prime.

16. $16x^2 - 9$

16. _____

17. $x^2 - 16x + 48$

17. _____

18. $x^2y^2 - 25$

18. _____

19. $-x^4 + 6x^3 - 2x^2$

19. _____

20. $x^2 - 3xy - 40y^2$

20. _____

Objective 6 – Factor using various methods. If not factorable, write prime.

21. $5x^2 + 30x + 25$

21. _____

22. $x^4y - 64x^2y$

22. _____

23. $5x^2 - 65x + 150$

23. _____

24. $-16x^3 + 4x$

24. _____

25. $2x^3y + 16x^2y^2 - 96xy^3$

25. _____

26. $12xy^4 - 27x^3y^2$

26. _____

Answers	
1.	15
2.	$16b^3$
3.	$6x^2y^2$
4.	$7(3x - 1)$
5.	$3x(5x^2 + 9x - 2)$
6.	$4x^3y^2(25y^3 - 5x + 7x^2y)$
7.	$(x + 11)(x - 11)$
8.	Prime
9.	$(9x + 1)(9x - 1)$
10.	$(7x + 6)(7x - 6)$
11.	$(x + 5)(x + 3)$
12.	$(x - 8)(x + 6)$
13.	$(x + 12)(x - 2)$
14.	$(x - 10y)(x - 2y)$
15.	$(x - 7y)(x + 6y)$
16.	$(4x + 3)(4x - 3)$
17.	$(x - 4)(x - 12)$
18.	$(xy + 5)(xy - 5)$
19.	$-x^2(x^2 - 6x + 2)$
20.	$(x - 8y)(x + 5y)$
21.	$5(x + 5)(x + 1)$
22.	$x^2y(x + 8)(x - 8)$
23.	$5(x - 10)(x - 3)$
24.	$-4x(2x + 1)(2x - 1)$
25.	$2xy(x + 12y)(x - 4y)$
26.	$3xy^2(2y + 3x)(2y - 3x)$