

Chapter 10.5-10.7 Test Review

Name: _____

Section 10.5: Intro to Factoring

Factor out the greatest common factor.

1.) $3x + 18$

2.) $-2c + 10$

3.) $5x - 10x^2$

4.) $3x^5 - 12x^2$

5.) $2x^3 + x^2$

6.) $10x^3 - 12x^2 + 4x$

Factor by grouping.

7.) $x^4 + 4x^3 + 2x + 8$

8.) $2x^3 + x^2 + 2x + 1$

9.) $3x^3 - 6x^2 - x + 2$

10.) $5x^5 + x^3 + 20x^2 + 4$

Section 10.6: Factoring $x^2 + bx + c$ and Factoring $ax^2 + bx + c$

Factor the trinomials.

13.) $x^2 - 2x - 3$

14.) $3x^2 + 16x + 5$

15.) $5x^2 + 2x - 3$

16.) $6x^2 + 5x + 1$

Solve the equation by factoring.

17.) $2x^2 + 19x - 10 = 0$

18.) $x^2 - x = 20$

19.) $x^2 - 6x + 9 = 0$

20.) $3 = 5x^2 + 2x$

Section 10.7: Factoring Special Products

Factor the expression.

21.) $x^2 - 25$

22.) $x^2 - 49$

23.) $25x^2 - 16$

24.) $100x^2 - 36$

Solve the equation by factoring.

25.) $4x^2 - 9 = 0$

26.) $x^2 = 4$

27.) $9x^2 - 16 = 0$

28.) $x^2 - 36 = 0$