

Factoring/Solving By Factoring Review

Name \_\_\_\_\_ Date \_\_\_\_\_

Factor completely.

1.  $6n^3 - 18n$

2.  $a^2 - 16$

3.  $4x^5 + 8x^3 - 2x^2$

4.  $y^2 + 5y - 14$

5.  $6x^2 - 19x + 15$

6.  $5m^2 - 20$

7.  $r^2 + 14r + 40$

8.  $2a^2 + 8b^2$

9.  $3p^3 + p^2 + 15p + 5$

10.  $2x^2 + 28x + 98$

11.  $n^2 - 6n + 9$

12.  $x^3 + 2x^2 - 16x - 32$

13.  $4a^2 + 38a + 34$

14.  $9h^4 - 25$

15.  $6m^2 + 4m - 10$

16.  $2k^4 - 32k^2$

Solve by Factoring.

1.  $(x + 3)(2x - 1) = 0$

2.  $x^2 - 9 = 0$

3.  $5x^2 - 30x = 0$

4.  $x^2 - 21x = -108$

5.  $r^2 + 169 + 26x = 0$

6.  $2m^2 - 8 = 0$

7.  $x^2 - 60 = -11$

8.  $8x^2 + 6x = 5$

9.  $p^3 + 3p^2 - 4p - 12 = 0$

10.  $2x^2 + 5x = 12$

11.  $4y^3 - 36y = 0$

12.  $12w^2 + 7w = -1$

13.  $(4x - 5)(2x - 6)(3x - 4) = 0$

14.  $a^2 + 3a - 31 = -3$