

Name: _____

Date: _____

Solving Quadratics by Factoring Out **Answers****Section I. Find the zeros of each equation.**

1. $4x^2 - 8x = 0$

$x = \{0, 2\}$

2. $3x^2 - 12x = 0$

$x = \{0, 4\}$

3. $x^2 + 5x = 0$

$x = \{-5, 0\}$

4. $6x^2 + 18x = 0$

$x = \{-3, 0\}$

5. $27x^2 - 9x = 0$

$x = \left\{0, \frac{1}{3}\right\}$

6. $10x^2 + 18x = 0$

$x = \left\{-\frac{9}{5}, 0\right\}$

7. $24x^2 - 20x = 0$

$x = \left\{0, \frac{5}{6}\right\}$

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

$x = \{-7, 0\}$

9. $13x^2 - 14x = -7x^2$

$x = \left\{0, \frac{7}{10}\right\}$

10. $12x^2 + 15x = 6x$

$x = \left\{-\frac{3}{4}, 0\right\}$

11. $72x^2 = 45x$

$x = \left\{0, \frac{5}{8}\right\}$

12. $35x^2 + 12x = 27x$

$x = \left\{0, \frac{3}{7}\right\}$

13. $17x^2 + 49x = -4x^2$

$x = \left\{-\frac{7}{3}, 0\right\}$

14. $83x^2 - 20x = 23x^2$

$x = \left\{0, \frac{1}{3}\right\}$