Algebra I Worksheet #4 Unit 13 Selected Homework Solutions

Solve each of the following **using the square root property**. Show all of your work neatly organized. If any solution is irrational, then give its exact value in standard radical form. Show your work neatly organized.

3. $x^2 - 12 = 0$

$x^2 = 12$

$x = \pm\sqrt{12}$

$x = \pm 2\sqrt{3}$

4. $3x^2 - 1 = 0$

$3x^2 = 1$

$x^2 = \frac{1}{3}$

$x = \pm\sqrt{\frac{1}{3}}$

$x = \pm\frac{\sqrt{3}}{3}$

7. $2x^2 - 5 = 0$

$2x^2 = 5$

$x^2 = \frac{5}{2}$

$x = \pm\sqrt{\frac{5}{2}}$

$x = \pm\frac{\sqrt{10}}{2}$

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

$5x^2 = 9$

$x^2 = \frac{9}{5}$

$x = \pm\sqrt{\frac{9}{5}}$

$x = \pm\frac{3\sqrt{5}}{5}$

13. $7x^2 - 2 = 0$

$7x^2 = 2$

$x^2 = \frac{2}{7}$

$x = \pm\sqrt{\frac{2}{7}}$

$x = \pm\frac{\sqrt{14}}{7}$

15. $3x^2 - 25 = 0$

$3x^2 = 25$

$x^2 = \frac{25}{3}$

$x = \pm\sqrt{\frac{25}{3}}$

$x = \pm\frac{5\sqrt{3}}{3}$