

Name_____ Date_____ Pd_____

Algebra 2 Homework

Solve by square root method.

1. $3x^2 = 27$

2. $5x^2 + 1 = 51$

3. $x^2 + 50 = 0$

4. $2x^2 - 1 = 39$

5. $17 + 3x^2 = 9$

6. $(x - 5)^2 = 16$

7. $5(x + 1)^2 = 30$

8. $2 - (x - 2)^2 = 15$

9. $3x^2 = 20$

Solve by factoring.

10. $x^2 - 6x + 8 = 0$

11. $(2x - 5)(x - 1) = 2$

12. $x^2 = 49$

13. $5x^2 - 1 = 7x + 5$

14. $9x^2 - 24 = 1$

15. $3(x + 2) = x(x - 2)$

ANSWERS:

1. ± 3

2. $\pm\sqrt{10}$

3. $\pm 5i\sqrt{2}$

4. $\pm 2\sqrt{5}$

5. $\pm \frac{2i\sqrt{6}}{3}$

6. $5 \pm 4 = 9$ and 1

7. $-1 \pm \sqrt{6}$

8. $2 \pm i\sqrt{13}$

9. $\pm \frac{2\sqrt{15}}{3}$

10. 2 and 4

11. $\frac{1}{2}$ and 3

12. ± 7

13. $-\frac{3}{5}$ and 2

14. $\pm \frac{5}{3}$

15. -1 and 6