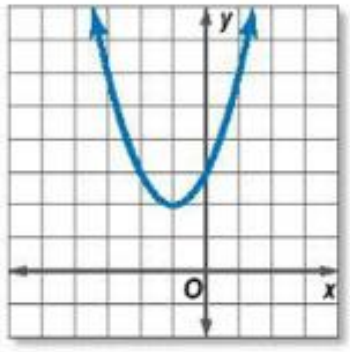
Day 06 HW Solving Quadratic Equations by Graphing & Factoring

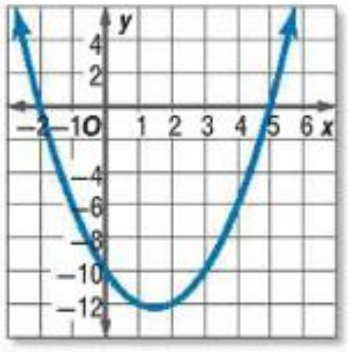
1-3: Use the related graph of each equation to determine its solutions.

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



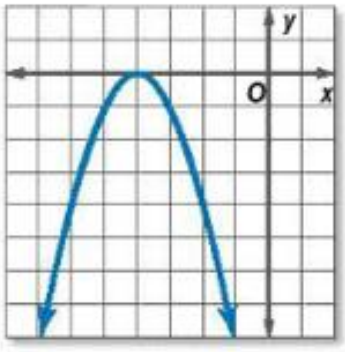
Solutions: _____

2. $x^2 - 3x - 10 = 0$



Solutions: _____

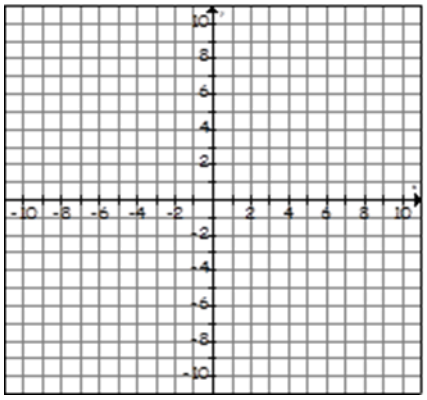
3. $-x^2 - 8x - 16 = 0$



Solutions: _____

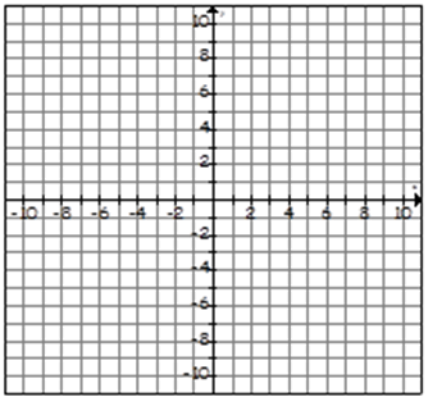
4-9: Solve each equation by graphing. DO NOT USE YOUR CALCULATOR!

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



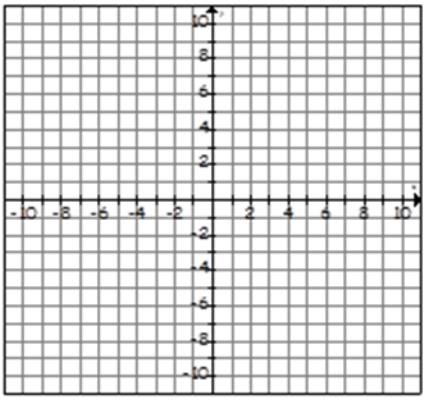
Solutions: _____

5. $x^2 - 4x - 5 = 0$



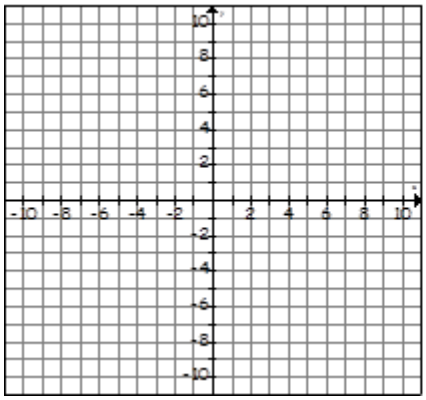
Solutions: _____

6. $-3x(x - 2) = 0$



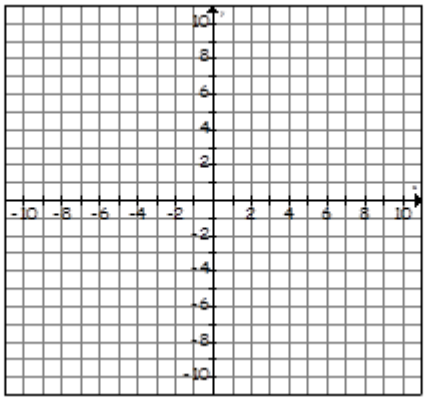
Solutions: _____

7. $x^2 + 4x = -6$



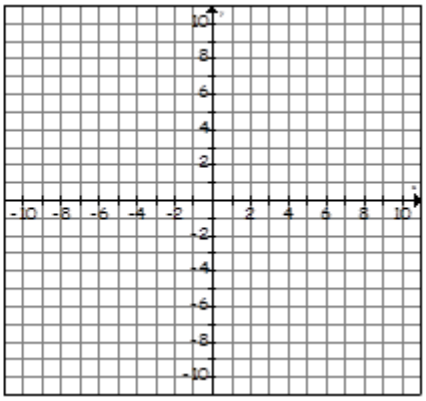
Solutions: _____

8. $\frac{1}{2}(x + 2)^2 = 8$



Solutions: _____

9. $-2(x - 1)(x + 3) = 0$



Solutions: _____

10- 15: Use the calculator to find the approximate roots of each quadratic equation rounded to the nearest hundredth.

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

Solutions: _____

11. $x^2 - 3x - 18 = 0$

Solutions: _____

12. $4x - x^2 + 8 = 0$

Solutions: _____

13. $-12 - 5x + 3x^2 = 0$

Solutions: _____

14. $x^2 - 6x + 4 = -8$

Solutions: _____

15. $9 - x^2 = 12$

Solutions: _____

16- 21: Solve each quadratic equation by factoring and the Z.P.P.

16. $9a = 10a^2$

17. $16x^2 = 49$

18. $4x^2 - 35x = 9$

19. $7y^2 - 4y$

20. $8x^2 + 2x - 3 = 0$

21. $8x^2 - 10x = 0$

22. $-6x^2 = -26x + 20$

23. $3x^2 - 21x + 30 = 0$

24. $4x^2 = -20x - 25$

25- 27: Write a quadratic equation, in standard form that has the following roots.

25. $\{3/2, -4\}$

26. $\{-8, -6\}$

27. $\{-3/2, -1/2\}$