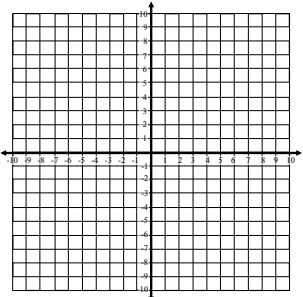
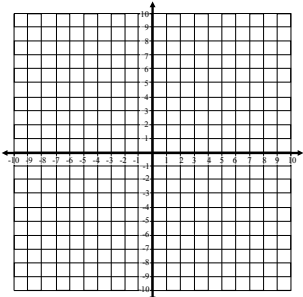


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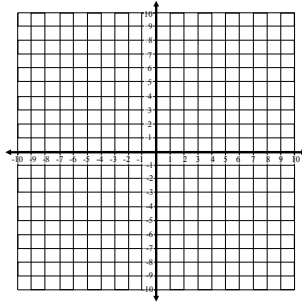
Unit 2 Review

<p>1. Factor and solve the equation. $x^2 - 100 = 0$</p>	<p>2. Factor and solve the equation. $x^2 + 10x + 25 = 0$</p>
<p>3. Factor and solve the equation. $x^2 + 9x + 18 = 0$</p>	<p>4. Approximate the radical to the nearest tenth. $\sqrt{34}$</p>
<p>5. Approximate the radical to the nearest tenth. $\sqrt{82}$</p>	<p>6. Solve for x and simplify. $x^2 = 72$</p>
<p>7. Solve for x and simplify. $x^2 = 54$</p>	<p>8. Solve for x and simplify. $(x + 2)^2 = 75$</p>
<p>9. Solve for x and simplify. $(x - 5)^2 = 24$</p>	<p>10. Complete the square to determine the roots. $x^2 - 14x + 9 = 0$</p>
<p>11. Complete the square to determine the roots. $x^2 + 6x - 2 = 0$</p>	<p>12. Determine the zeros using the quadratic formula. $f(x) = x^2 + 2x - 9$</p>
<p>13. Determine the zeros, vertex, and y-intercept. Then, graph. $f(x) = -x^2 + 5x - 8$</p> 	<p>14. Determine the zeros, vertex, and y-intercept. Then, graph. $f(x) = -2x^2 + 5x + 3$</p> 

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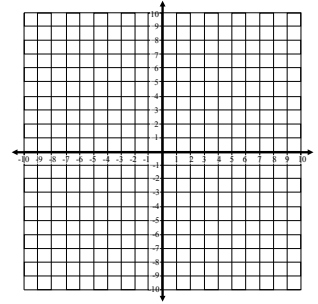
15. Determine the zeros, vertex, and y -intercept. Then, graph.

$$f(x) = x^2 + 2x - 9$$



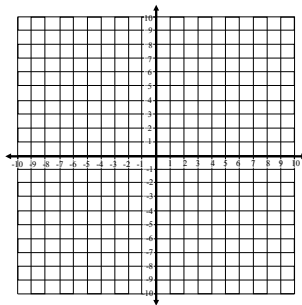
16. Determine the zeros, vertex, and y -intercept. Then, graph.

$$f(x) = x^2 + 6x - 2$$



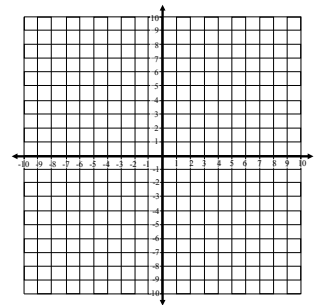
17. Graph and determine the solutions.

$$f(x) > x^2 + 6x - 5$$



18. Graph and determine the solutions.

$$f(x) \leq -x^2 + 2x$$



19. Solve the system of equations.

$$\begin{cases} y = 2x - 3 \\ y = x^2 - 5x + 9 \end{cases}$$

20. Solve the system of equations.

$$\begin{cases} y = x + 1 \\ y = -x^2 + 2x - 3 \end{cases}$$

21. Simplify.

$$\sqrt{-49}$$

22. Simplify.

$$\sqrt{-90}$$

23. Simplify.

$$(3 - 2i) + (5 + i)$$

24. Simplify.

$$(3 - 2i) - (5 + i)$$

25. Simplify.

$$(3 - 2i)(5 + i)$$

26. Simplify.

$$(6 + 4i)(6 - 4i)$$

27. Simplify.

$$i^{76}$$

28. Simplify.

$$i^{13}$$