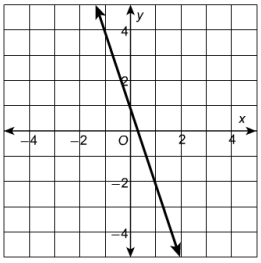
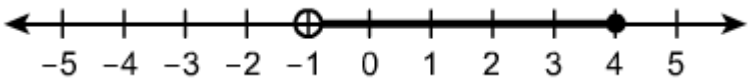
FCPS Algebra Common Assessment 4 REVIEW **Name _____**

Question Number	Question
1	What is the value of x in this equation? $6x - 3(4x - 5) = 33$
2	How many solutions are there to this equation? $3x - 10 + 4x = -2(x - 4) + 9x$
3	Write the equation in slope-intercept form that matches the graph. 
4	Write a compound inequality to represent the graph shown. 
5	Find the solution to the system of equations. $5x + 6y = -6$ $7x - 3y = -54$

6	Simplify: $(4x^2 + 2x - 3) - (3x^2 + 6)$. Write your answer in standard form.
7	What is the product of $(3x + 4)(x^2 + 2x - 1)$?
8	What is the product of $(2x - 5)(2x + 5)$?
9	☐ and $12x^2y$ have a GCF of $4x^2$. **Fill in the blank.**
10	What is the factored form of $x^2 - 5x - 14$?

11	Factor $3y^2 + 15y - 18$ **completely**. (Hint: Factor out a GCF first)
12	Factor the prefect square trinomial $9x^2 - 12x + 4$.
13	What is the vertex of the function $f(x) = 2(x + 1)^2 + 4$?
14	An object is launched at 64 ft per section from an elevated platform. The funciton is $f(x) = -16x^2 + 64x + 6$, models its trajectory over time. What is the maximum height the object reaches after it was thrown? (Hint: Find k)
15	What are the solutions to $x^2 - 5x - 14 = 0$?

16	Simplify $5\sqrt{3x^3} \cdot 2\sqrt{6x}$.
17	What are the solutions of $5x^2 + 16x + 3 = 0$ by factoring?
18	Use the Quadratic Formula to solve $2x^2 + 5x = 2$. Round your answer to the nearest hundredth.
19	What are the coordinates of the vertex (h, k) of the graph of $y = 2x^2 + 8x + 2$?
20	Write $\sqrt{80}$ without a prefect square factor in the radicand.