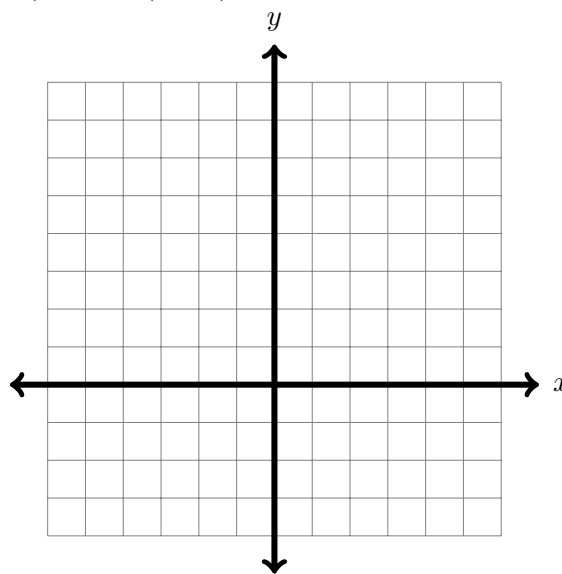| College Algebra | Name: |
| Study Guide 0 | Class: |
| Due Date: | Score: |

**No Work $\Leftrightarrow$ No Points**

**Use Pencil Only $\Leftrightarrow$ Be Neat & Organized**

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1. **(2 points) Evaluate** $\sqrt{b^2 - 4ac}$ **for** $a = 5$, $b = 2$, **and** $c = -3$.

1. _____

2. **(3 points) Draw a line that contains** $A(3, -2)$ **and** $B(-3, 6)$**. Show the rise and run of its slope.**



3. **(2 points) Solve:** $2(x - 3) - 4 = -10$

3. _____

4. **Simplify:**

    (a) **(2 points)** $(2x - 3)(2x + 3)$
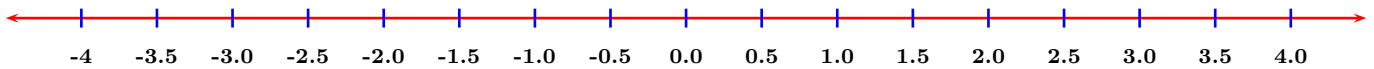
    (a) _____

    (b) **(2 points)** $(x + 5)^2$

    (b) _____

    (c) **(2 points)** $(-4x^2)^3$

    (c) _____

5. **(3 points)** **Graph the solution, and express your final answer in interval notation:**
$2x - 7 \leq 5x + 2$



    **5.** _____

6. **Factor completely:**

    (a) **(3 points)** $4x^2 + 20x$

    (a) _____

    (b) **(3 points)** $4x^2 - 81$

    (b) _____

7. **(3 points)** **Solve:** $x^2 - 4x - 45 = 0$ **by factoring method.**

    **7.** _____