

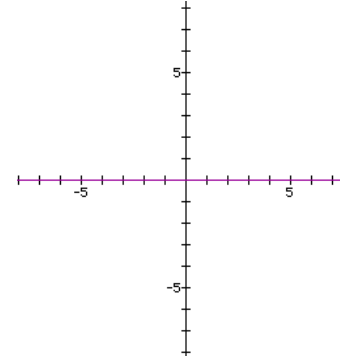
Name _____

Date _____

BECAUSE THIS IS A GRADED ASSIGNMENT, YOU ARE NOT ALLOWED TO EITHER GIVE OR RECEIVE HELP IN ANSWERING THESE QUESTIONS.

Answer each question as indicated. **Think** first, then write. **Show all your work**, and remember to **check** your answers! If you use scrap paper number your work and hand the scrap paper in. Please place your answers in the spaces provided.

- On the grid to the right, correctly place the points $(-1, 4)$ and $(2, -5)$. Then find the coordinates of their midpoint.



- Find the distance between the points $(-1, 4)$ and $(2, -5)$.

- Use interval notation to express the domain and range of the function $f(x) = \sqrt{3x+2}$. You must show your algebraic work for the domain. You can plot points and use the graph for the range.

Domain = _____

Range = _____

- Let $g(x) = 4x^2 - x - 3$. Compute a) $g(3)$ and b) $g(-2)$.

4a. _____

4b. _____

- For the function on the graph below, specify a) domain, b) range, c) interval on which the function is increasing, and d) interval on which the function is decreasing. Use interval notation for 5c and 5d.



5a. _____ 5b. _____

5c. _____ 5d. _____

- Find the a) x -intercept, b) y -intercept, and c) slope of the line $2x + 5y = 8$.

6a. _____

6b. _____

6c. _____