

Alg. IA
Q4 HW 7

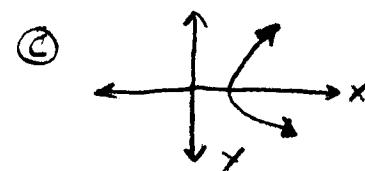
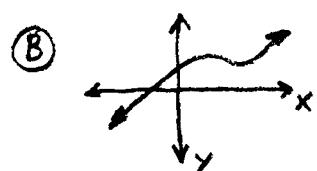
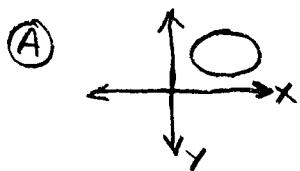
Name: _____ Per. _____
ALL WORK ON LOOSELEAF DATE: _____

① $5x - 2 < 2x + 1$

② $\frac{3}{4}x \leq -2$

③ $5(2x - 3) < -4(x - 2)$ ④ $-8x \geq x - 14$

⑤ For each graph, explain why it is or why it is not a function:



⑥ For each relation, explain why it is or why it is not a function and draw a mapping for EACH relation.

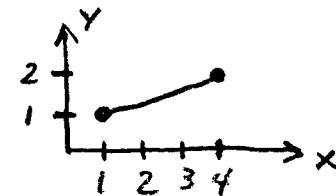
Ⓐ $\{(1, 3), (2, -3), (5, 6), (3, 3)\}$ Ⓑ $\{(1, 2), (3, 2), (5, 2), (4, 2)\}$

⑦ $f(x) = 2x^2 + 1$ $g(x) = -3x + 5$

Ⓐ $f(2) = ?$ Ⓑ $f(-3) = ?$ Ⓒ $g(5) = ?$ Ⓓ $f(2E) = ?$

⑧ Find the range of $y = f(x) = 2x - 6$ if $x \in \{-2, -1, 0, 5\}$

⑨ List the domain and range of the line segment shown:



⑩ What is the surface area of a cube with sides 6 inches?

⑪ What is the circumference of a circle of diameter = 4 ft?

Find the slope of the line through each pair of points:

⑫ $(-2, 6), (5, 1)$ ⑬ $(1, 0), (-6, 4)$ ⑭ $(8, -8), (2, 4)$ ⑮ $(a, b), (-a, b)$