> **Reminders**
>
> - Show all your work for the weekly reviews! Grading is based completion and method, not just the final answer.
> - Selected answers are provided on the last page. To discuss solutions for other problems, see your TA, visit office hours, or visit the MLC.
> - **TAs review Exam 1, questions and answers.**

Example 1. Let $g(x, y) = \dfrac{x^2 + 2y}{y}$.

(a) Find the domain of g

(b) Sketch the level curves $g(x, y) = c$ for $c \in \{-1, 0, 2\}$. *Note*: Some authors prefer the term **contour** or **contour plot** instead of **level curve**.
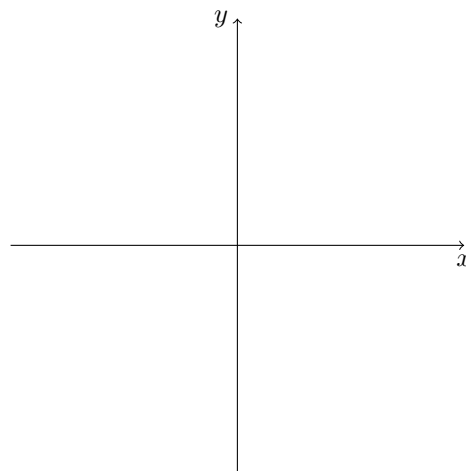
Example 2. Find the linear approximation to the function $f(x, y) = 1 + 6x \ln(xy - 5)$ at the point $(3, 2)$.

(a) Use it to approximate $f(3.005, 1.995)$

(b) Write the equation of the tangent plane of the graph of $z = f(x, y)$ at $(x, y) = (1, 6)$.

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Selected Answers:

> **Ex2:**   0.91