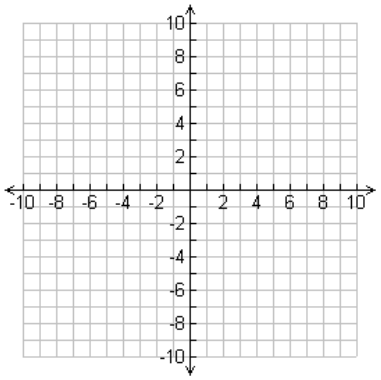
Math 132 – Trigonometry Name_____
Section 1.5 Video Worksheet – 9th Edition

Basic Graphs

For each function, please sketch the graph and give its domain, range, and symmetries

- $f(x) = \sqrt{x}$



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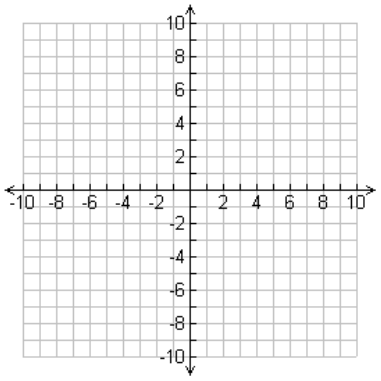
- $f(x) = \frac{1}{x}$



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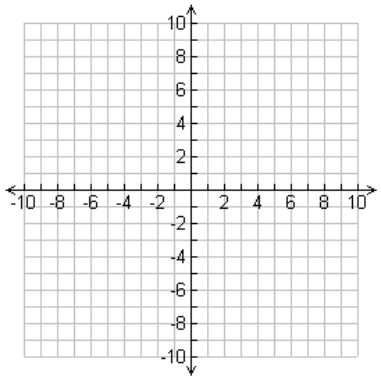
- $f(x) = |x|$



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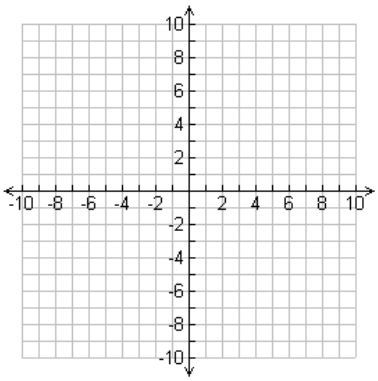
- $f(x) = 3$



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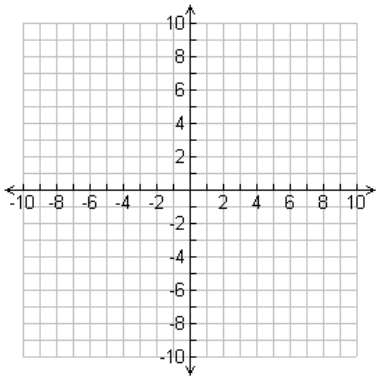
- $f(x) = \sqrt[3]{x}$



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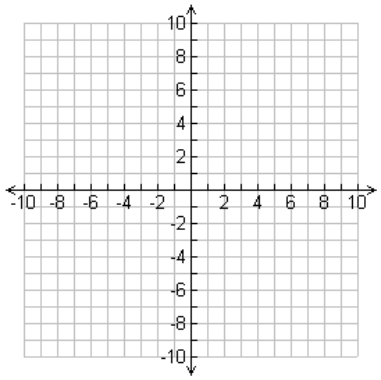
- $f(x) = mx + b$



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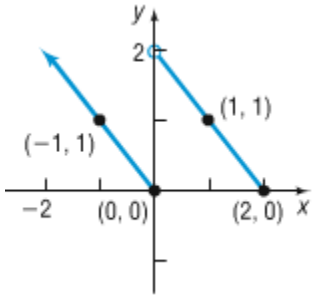
Corvo DUS offers a data plan for $49.99. It allows up to 10500 MB to be downloaded a month and charges $.045 per MB for additional downloads. The following function is used to compute the monthly cost for a customer:

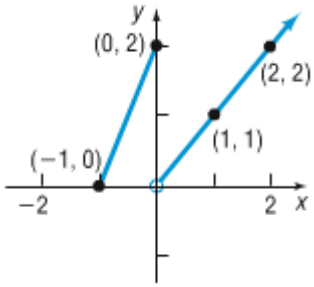
$$f(x) = \begin{cases} 49.99, & if\ 0 \le x \le 10500 \\ 0.045x - 16.25, & if\ x > 10500 \end{cases}$$

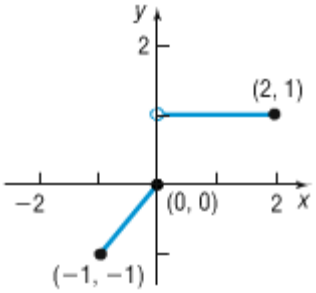
where x is the number of MBs used per month. Calculate the cost of the space used per month for the following number of MBs.

a) 5900 b) 12980 c) 10600

Write a piecewise function for each of these graphs







Mail rates for Gristol charge $1.59 for all high-class outgoing mail that weighs up to 1 ounce, adding $0.21 per ounce above that up to 15 ounces. High-class mail charges don't apply for anything weighing more than 15 ounces. Create a function that calculates cost, *C*, for mail weighing x ounces.