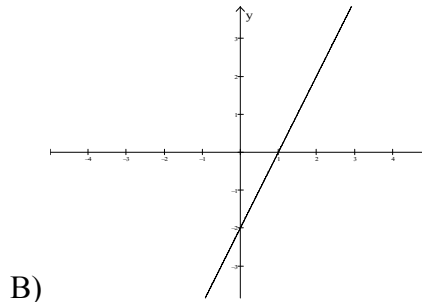
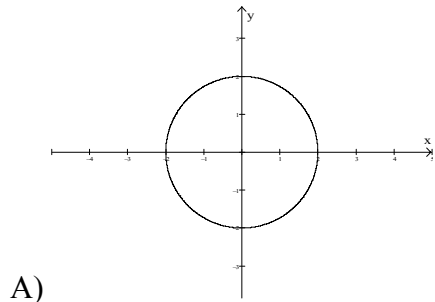


Math 095 Test #1

Show all work. Answers showing no work will be given no credit.

Functions

- 1) Determine whether each of the following is a graph of a function. **Explain why or why not?**



- 2) Find the indicated functional value for $f(x) = \frac{x-3}{2x-5}$

A) $f(1)$

B) $f(x+2)$

c) Use interval or set notation to write the domain of $f(x)$

3) Let $f(x) = \sqrt{x-2}$ $g(x) = 2x$

A) Find $(f+g)(x)$

B) What is the domain of $(f+g)(x)$

Lines

4) Let $f(x) = (-2/3)x - 1$

a) Determine the slope and y-intercept.

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b) Sketch the graph

5) Find a linear function parallel to $3x+2y=4$ with a y-intercept $(0,1)$.

6) Find the intercepts of the function: $4x+2g(x)=7$.

Inequalities

7) Write all solutions for the inequality, $-x+2 \leq 5$, using both set **and** interval notation.

8) Write in interval notation the solution for the compound inequality:

a) $-1 < y < 3$

b) $y > 4$ and $y < -2$

9) Write in interval notation the solution for the compound inequality:

a) $x > -2$ or $x \leq 4$

b) $y > 4$ or $y < -2$

Absolute Values

10) Find all solutions for the absolute value equation: $|2y - 4| = 11$

11) Find all solutions for the absolute value inequality: $\left| \frac{x^{2x} - x^\pi}{4x} \right| < 0$