

Math 6
Assignment 9
October 18, 2017

1. Use the graphing paper provided in class, plot the following functions.
 - (a) $y = x$
 - (b) $y = 3x + 1$
 - (c) $y = 0.5x + 3$
2. Solve the following equations for x.
 - (a) $x = 0$
 - (b) $3x + 1 = 0$
 - (c) $0.5x + 3 = 0$
3. Compare your answers in questions 1 and 2. What do you find in common?
4. Nancy and Carol just became friend with Jacob, and they want to know when his birthday is. Jacob gives him a list of 10 possible dates:

April	14	15		17		
May	14		16			
June				17	18	
July		15	16			19

Jacob then separately tells Nancy the month of his birthday, and Carol the day of his birthday.

Nancy: I don't know when Jacob's birthday is, but I know that Carol doesn't know either.

Carol: At first I didn't know when Jacob's birthday is, but I know now.

Nancy: Then I know when Jacob's birthday is, too.

So, when is Jacob's birthday?

(Hint: if you are still stuck after some serious thinking, look up Cheryl's Birthday on Wikipedia.)