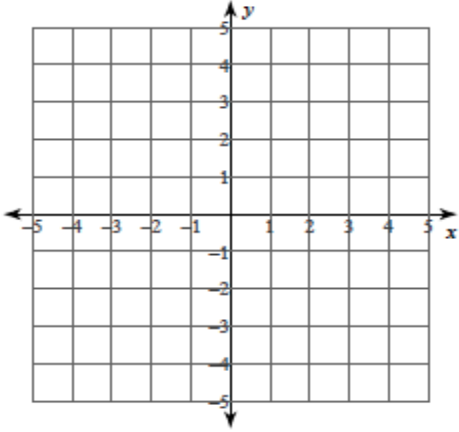


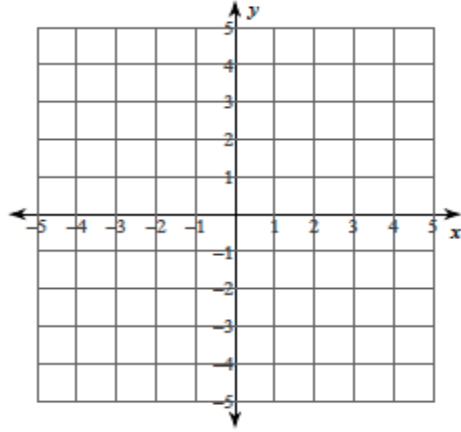
9.6 - 9.8 Practice

Graph the following:

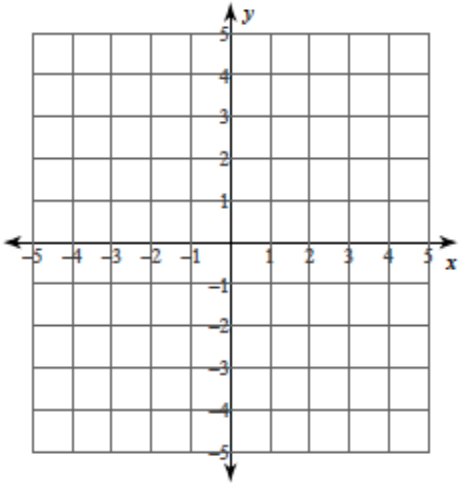
1) $|y + 4| \geq x$



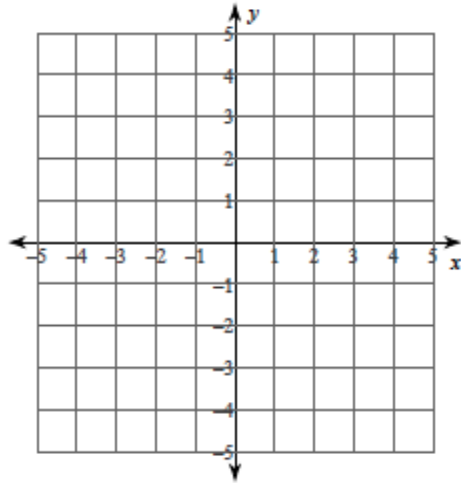
2) $|y - 2x| \leq 3$



3) $|x - 4| < y$

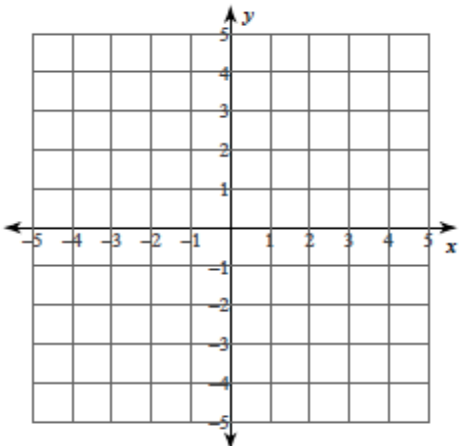


4) $|y - 1| > 2x$

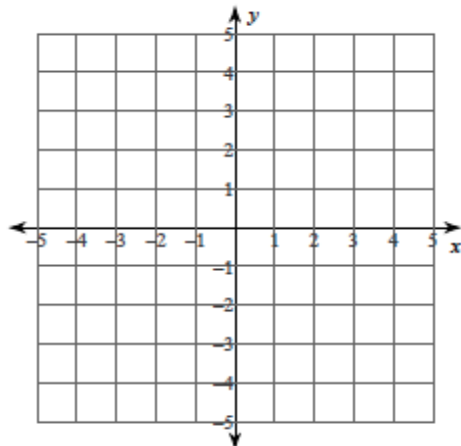


Write the equation for the following graphs:

5)



6)



Use systems to solve the following problems:

- 7) The units digit of a 2-digit number is $\frac{1}{2}$ the tens digit. If the digits are reversed, the sum of the new number and original number is 132. Find the number.

- 8) The sum of the digits of a 2-digit number is 12. The number is 3 more than four times the units digit. Find the number.

- 9) A boat traveled 54 miles downstream in 3 hours. On its return trip, it traveled 48 miles in four hours. What was the speed of the boat and rate of the current?

- 10) The skater dude skated 6 miles upwind for an hour, but coming back going downwind, he traveled 9 miles in 45 minutes. What was the speed of the skater and the rate of the wind?

- 11) \$28,000 was invested part at 7% and the rest at 4%. After one year, both accounts earned a total of \$1510 interest. How much was invested in each account?

- 12) Malia invests \$4000, part at 10% and the rest at 12% annual interest. If she earns \$460 interest at the end of one year, how much did she invest at each rate?

- 13) Chewy invests \$6000, part at 8% and part at 12%. If he earns \$640 in interest after a year, how much is invested at each rate?

- 14) Stosh invests \$9000, part at 5% and part at 9%. If he earns \$614 in interest after a year, how much is invested at each rate?

- 15) Siri invested \$15,000, part at 6% and part at 10%. After one year, the 10% investment **earned** \$100 less interest than the 6% investment. How much money was invested at each rate?