

1. Consider $2x + 8 = 3x - 4$.
 - a) Solve numerically. (Make sure TBLSET is in auto mode.)
 - b) Solve graphically. Is it wise to use a standard window?
 - c) Determine an appropriate window for this problem.
Xmin _____ Xmax _____ Ymin _____ Ymax _____
How does the table help you decide what your window should be?
2. Solve $0.5x + 8.76 = 15.22x - 18.77$ graphically.
Determine an appropriate window for this problem.
Xmin _____ Xmax _____ Ymin _____ Ymax _____
3. Solve $5x + 100 = -8x - 800$ graphically.
Determine an appropriate window for this problem.
Xmin _____ Xmax _____ Ymin _____ Ymax _____
4. You are interested in investing between \$3000 and \$5000 in a CD for one year. You find a bank that offers a simple interest rate of 6.5%. Use the formula $I = Prt$.
 - a) Determine an appropriate window as it relates to the problem, including the scale.
Xmin _____ Xmax _____ Xscl _____ Ymin _____ Ymax _____ Yscl _____
 - b) Explain how to find the interest earned when $P = \$3000$ and when $P = \$5000$.
 - c) Find the value of a \$5000 after one year.
 - d) How much money must you invest to earn approximately \$300 in interest? How would you solve this problem using a graphing calculator?
5. You receive a grade of 80, 60, and 75 on each of three exams. What grade must you receive on the fourth exam in order to have an average of 70 or better? (Assume all tests are weighted the same.)
 - a) Write an inequality that represents the problem.
 - b) Solve the problem graphically. Create the graph and explain how to find the solution.
6. Determine the number of solutions to each equation and solve.
 - a) $2|x - 4| = 8$
 - b) $|x + 22| = 0$
 - c) $|x + 5| = -2$
7. Solve $|2x - 18| \leq 22$ graphically.
 - a) Determine an appropriate window for this problem.
Xmin _____ Xmax _____ Ymin _____ Ymax _____
 - b) Which portion of the graph yields the solution?
 - c) What is the solution?
8. Solve $|5x - 6| > 12$ numerically.
 - a) What values should $y_1 = |5x - 6|$ equal?
 - b) What is the solution?