Possible 7-2 Activities

Note: Building in restrictions starting with “every point works” to a line of points that work to one or no points that work.

Note: Dependent solutions from 1150(S-Z; Called “parametric solution”: p. 552)?

Note: Argue why elimination and substitution work (e.g., assuming (x, y) does satisfy both equations)?

Note: Nonlinear systems?

Note: More than 2 variables? Unequal # of variables vs. equations?

Note: Work with points on only one or neither line?

Note: Car rental: which one to pick (depends). Farming: restrictions on land, labor cost, etc.

Note: 2x2 system to find equation of a line given 2 points.

Note: On elimination, If we mult. both sides of an equation by a number, do we have the same set of points as before?

S-Z: Most of all the rest.

p. 549: Does a somewhat formal presentation. Mostly linear algebra. 1120 level only in 8.1

p. 550: Elimination: add “equals to equals”, but does not get into detail (e.g., on what “equals” means and what we’re assuming). No justification for substitution.

p. 553: Shows graphically what is found algebraically, including inconsistent and dependent.

p.558 3x3 and beyond (Guassian elimination).

p. 561: 3x3 dependent : All 3 variables in terms of t.

HW fairly standard> #27: Give another parametric solution (i.e., switch indep. variable).

Calc-Medic: Unit 6

6.1: Guessing pair of mystery numbers that work for both statements (non-linear).

#4: line and circle (Note: Misses, tangent, hits twice)

#5: write a system with (3, -8) = solution.

6.2: Several problems- Many non-linear. A few stories.

6.3: Panera Charges fairly? Various scenarios. #3: find k so system has infinitely many solutions. #4: Mult Choice: What does an indep. System fulfill?

6.5: Pictures of 3x3 systems. Ask why a given system is easy to solve. Goes into matrices then.

6.8: Another “find k”. Draw graph of dep. System.

MFG: Ch. 8.1

8.4 checkpoint: What to do to see if a point is a solution?

8.6: what do the points on a graph represent?

Algebra Skills Refresher: Just gives how to do subst. and elimination. Various stories #24: If 6 votes switched (given total # of votes), other candidate wins. How many votes for each?

8.11: good d, r, t problem.

8.22: Etienne plans to open a coffee house, and he has $7520 to spend on furniture. A table costs $460, and a chair costs $120. Etienne will buy four chairs for each table. How many tables can he buy? A. Let x represent the number of tables Etienne should buy, and let y represent the number of chairs. Write an equation about the cost of the furniture, etc.

8.25 demand, cost, etc.

HW: Many Standard stories

Section 8.2: 3x3 systems

Gaussian Reduction

Several standard stories in HW (#40 = farmer).

ORCCA: Section I-4 (I-257)

4.1: By graphing

4.1.13: Predicting trends via system.

4.1.20 Dep. Case and notation. Notes in 4.1.22 that every point on the line is a solution, not every point in R2.

4.2: Substitution. Doesn’t give reasons behind it.

Mixture problems I-278-280

HW Standard problems. Mixture demographic on #77.

4.3 Elimination: I-296: Left sides should be the same as the right sides, so can add/subtract both concurrently (Note: Should have said when (x, y) satisfies both).

HW: Standard problems. #50: Find b so that system has infinite # of solutions.