I-18.01 Evaluation of cost behavior

Grosbeck Cattle Company has gathered the following information about operations for the past three years. Mathew Grosbeck has been expanding herd size and is frustrated that profits have not shown consistent growth.

	Year 1	Year 2	Year 3
Cow herd size	120	140	180
Revenues from sale of calves	\$102,000	\$119,000	\$153,000
Feed	18,000	21,000	27,000
Labor (1 cowboy per 120 cows)	24,000	48,000	48,000
Cow depreciation	15,000	17,500	22,500
Bull depreciation (1 bull per 30 cows)	1,667	2,083	2,500
Medications/vaccinations	3,000	3,500	4,500
Land lease	10,000	10,000	10,000
Operating income	30,333	16,917	38,500

- (a) Determine which costs are variable, fixed, and "step" fixed. Complete the "per unit" cost table on the preprinted worksheet.
- (b) How much is the per-cow contribution margin?
- (c) How do the "step" costs explain the struggle to achieve consistent growth in profits? What strategy should Mathew undertake to maximize profit potential for his operation?
- (d) Assuming Mathew's land will support a herd of 240 cows, project anticipated profits. Why is the profit more than twice as much as the amount that is earned on a herd size of 120 cows?