

Bright Eyes manufactures and sells two products. The first product is a disposable contact lens set that lasts about 3 months. The second product is a wetting solution. Customers of the first product use one bottle of solution each month. As a result, bottles of solution outsell lens sets by a 3:1 ratio. Lens sets sell for \$36 per set, and have a contribution margin ratio of 50%. The solution sells for \$6 per bottle, but only generates variable costs of \$1. The company's total fixed costs are \$9,900,000.

- (a) What level of total sales is necessary to achieve break even?
- (b) If a competitor began selling a wetting solution that forced Bright Eyes to reduce the price for its solution to \$3 (to maintain market share and the 3:1 ratio of solution to lens), how many lens sets must be sold for the company to break even?