To earn full credit for this worksheet, you must follow the MTH 60 Documentation guidelines and do your work in pencil. No late work accepted.

Keep in mind that your homework is part of your "grade application," just as a cover letter and resume are part of a job application. Impressions count. Neatness and completeness make a lasting impression on the instructor (so does turning your homework in on time).

1. Including 8.2% sales tax, a bed-and-breakfast inn charges $162.30 per night. Find the inn’s nightly cost before the sales tax. Remember to define your variable, use algebra to solve, show all of your work, and write your answer in a complete sentence.
2. Solve the proportion \( \frac{ax - b}{b} = \frac{c - d}{d} \) for \( x \).

3. A rectangular swimming pool has a width of 32 feet and an area of 1536 square feet. What is the pool’s length?